

**MAUI PLANNING COMMISSION
REGULAR MINUTES
SEPTEMBER 25, 2012**

A. CALL TO ORDER

The regular meeting of the Maui Planning Commission was called to order by Chairperson Kent Hiranaga at approximately 9:03 a.m., Tuesday, September 25, 2012, Planning Conference Room, First Floor, Kalana Pakui Building, 250 South High Street, Wailuku, Maui.

A quorum of the Commission was present. (See Record of Attendance.)

Chair Hiranaga: I'd like to call the Maui Planning Commission meeting to order. Today is Tuesday, September 25, 2012, and all Commissioners, almost all Commissioners are present. Before we start with official business, need to kind of get a consensus from the Commissioners whether we will be able to conclude today's business by noon therefore, precluding the need to order lunch. Is there any objection to not ordering lunch today? No objection.

Then moving on, at this time, I'll open the floor to public testimony. Anyone here that wishes to provide public testimony on any agenda item please come forward? Seeing none, public testimony is now closed. Moving onto Agenda Item B, Public Hearings. Director?

Mr. Spence: Good morning, Mr. Chairman, and Members. Our first public hearing item is Mr. Clyde Sakamoto Chancellor for the University Hawaii, Maui College requesting an SMA permit for PV system and our Staff Planner this morning is Mr. Danny Dias.

B. PUBLIC HEARINGS (Action to be taken after each public hearing.)

1. **MR. CLYDE SAKAMOTO, Chancellor, UNIVERSITY OF HAWAII - MAUI COLLEGE (UHMC) requesting a Special Management Area Use Permit for the proposed UHMC Photovoltaic System Project consisting of the installation of photovoltaic (PV) panels on new carport structures within the existing parking lot and related improvements located at the University of Hawaii - Maui College, TMK:3-8-007: 040 (por.), Kahului, Island of Maui. (SM1 2012/0002) (D. Dias)**

Mr. Danny Dias: Thanks Will, and good morning, Chair Hiranaga and Members of the Maui Planning Commission. The item before you this morning is very straight forward and fairly simple. The University of Hawaii at Maui College is proposing to construct carport-like structures in a portion of their rear parking lot. This is the parking lot that's next to the Maui Arts and Cultural Center and along Wahine Pio Avenue. The project will be constructed in a portion of the parking lot and ultimately it's the first four rows of parking stalls in that lot. Once constructed, the carport structures will then be fitted with photovoltaic panels and these panels are estimated to provide approximately 18 percent of the energy required at the UHMC campus which is a fairly substantial amount given the size of the campus. The structures will be approximately 12 feet high and slope downward to 9 feet and obviously that's for drainage purposes. I'll let the applicant get into the details of the project, but I would like to point out that the Department strongly supports this project. In my opinion it makes a whole lot of sense especially from a planning perspective. You're utilizing

existing space, you're not increasing your footprint, and of course, you're providing renewable energy. Ultimately, I think the real winners here are the students. You know, at the very least they'll get shaded parking. So with that, I'd like to hand it over to Clyde Sakamoto from the UHMC campus. Thank you.

Mr. Clyde Sakamoto: Thank you. Aloha. Good morning, Members of the Planning Commission. Wanna thank our Staff Planner, Danny Dias for giving my speech. I'll go quickly through my presentation so that lunch won't be an issue. But what I wanted to say was that we've got three different very important purposes for this project. One of course, is a financial one that Danny mentioned. We want to drive down our power consumption and costs such that we can repurpose some of the money that's going towards our current expenditures for electricity back to educational purposes and 18 percent is no small amount. So we're looking forward to that.

At the same time, you're aware that we're gonna be opening up our science facility and some of you who may recall, we made a pledge to you back when we were before you regarding our science facility that we would develop metrics to report back to students and the community at large around how our energy kinds of contributions were contributing to our overall sustainability on campus with regard to production as well as consumption and that's going to available through about seven kiosks that would be around the campus. This particular project is a contributor to our overall Sustainable Sciences Management Bachelors of Applied Science Program, Sustainable Construction Technology Program, potentially to our Engineering Technology Program so it connects not simply as an energy producing structure and environmental contributor, a financial contribution but an education one right at the core and heart of it. And it's education not simply for students on the campus, but we believe for the community at large that will get a chance to see what a carport photovoltaic facility would look like. And so we think that it will be an important contribution going forward. You'll note that we're covering a third of our parking lot. Our anticipation is that we will do iterations of this first four rows going forward as the technology improves. So within three or four years, we expect that the technology that will continue to evolve be more efficient and we're going to cover more of our parking lots as we go forward. And so that in essence is where it is that we're headed, why it is we need this particular project and we look forward to any questions that you may have in your approval of this very important project for our college and community. Mahalo.

Chair Hiranaga: We're gonna reserve questions till later.

Mr. Mike Munekiyo: Good morning, Mr. Chair and Members of the Commission. My name is Mike Munekiyo. We are assisting the college in processing of this application and what I'd like to do is briefly provide an overview of the project and of course, we do have a number of resources available here at the Commission meeting. Of course, we have Chancellor Sakamoto, we also have Vice-Chancellor Dave Tamanaha, Stuart Zinner from the college, who is the Energy Management Project Director. We have Ron Young from Johnson Controls, who is the contractor designer. Mike Miyabara, our landscape architect is also here in case there are questions with respect to project landscaping.

As previously described by both the Chancellor and Danny, the college is proposing carport structures and the power generated from these carport structures will be then connected via underground cables to an existing central chiller building where they existing electrical distribution

infrastructure is located. Real quickly, I think Commissioners are familiar with the University of Hawaii, Maui College campus area. Kaahumanu Avenue here, Kahului Beach Road here, Wahine Pio Avenue here, and the Maui Arts and Cultural Center in this location. The parking lot as Danny mentioned is the rear parking lot along Wahine Pio in this area here. A closer look in, the dark bands are the double loaded parking lot rows which will be occupied by the carport structures and PV panels, and by double loaded what I'm saying is there are two cars, two parking stalls facing head to head and the parking carport structures will cover both parking stalls. This is the central chiller building where the power from the PV panels will be connected for distribution campus wide.

This is an illustration of or design of one of two alternatives being considered by the university. This is an carport structure on aluminum framing. The flush mounted PV panels atop on a reinforced concrete footing. As Danny mentioned, a slight tilt to the carport structure, 9-foot height approximately on this side, almost 12 feet on this side, but you know, there'll be one car parked on this location, the other car facing it this way, so there are four rows of parking stalls or parking stalls being proposed to be covered by the PV structures and panels. As an alternative to this design, we are looking at another design which would be precast concrete construction, and of course, the dimensions are very similar to the previous dimensions and the flush mounted PV panels atop. We did present both of these alternatives to the UDRB, the Urban Design Review Board, and there were no comments with respect to the design itself. I think the interest as Chancellor mentioned was that we are seeking to provide a program for sustainability at the college. So we do have two designs available, and this one, and this. The decision to select the final design is probably another week and a half or two away. And what's being done right now is an examination of operations and maintenance requirements, cost implications for both, and once that analysis is completed in a couple weeks, then a decision can move forward with one of these alternatives will be made.

As Danny did mention, this system is anticipated to generate about 18 percent of the university's daily electricity needs and that translates to about 611 kilowatts of electricity. This is a photograph of the parking lot from Wahine Pio Avenue. This is from the driveway location looking towards the campus. Here another view looking back. You can see the Maui Arts and Cultural Center in the background. This view from the Pa`ina Building, another view from the Ka`a`ike Building, again, looking back you can see the MACC back here. And again, I just wanted to point out there are some trees that will need to be relocated. There are gonna be some light poles that are gonna be relocated and I'll go over that in a minute. This is the central chiller building where the power generated by the PV panels will be connected. So it's adjacent to the parking lot. It's not too long of a run to get it back there to the distribution network.

I did mention that there will be trees that will need to be relocated. Again, the blue strips here indicate the PV carport structures and panel locations. There are 40 plus trees that would need to be relocated and the college has been coordinating with the Department, Planning Department as to how best to mitigate the tree relocation element. And what is proposed is to have the trees relocated along the perimeter of the parking lot and primarily to provide a buffer along Wahine Pio, and we'll show you a section of what that might look like. This is a typical section here. Again, from this point here, to my right is the parking lot. This is where the existing trees will be relocated. There will be a secondary row of smaller trees and ground cover and that whole design here is intended to provide that visual buffer which would keep the drive along Wahine Pio fairly pleasant. This is what it looks like today. You've got some landscaping, but really the intent is to provide a more thorough landscaping buffer along Wahine Pio. At full growth, this is what we anticipate that

screening to look like. Again, all of the trees will buffer the height of the PV structures, carport structures will not exceed the tree height. So the idea again, is to buffer that view from Wahine Pio.

Before I close, I did mention that some of the light pole standards would be relocated as a result of the placement of the carport structures. Under the carport structures there will be lighting replacement, again, for security and safety purposes. So whatever light standards are removed, it will be replaced by lighting under the carport structures themselves. So if there are any questions, we've got our resources here. We'll be happy to answer any questions the Commissioners may have.

Chair Hiranaga: All right, thank you. At this time, I'd like to open the public hearing.

a) Public Hearing

Chair Hiranaga: Is there anyone here that wishes to testify regarding this agenda item, please come forward? Seeing none, the public hearing is now closed. I'll open the floor to questions from Commissioners. Commissioner Lay?

Mr. Lay: This is concerning the panels just as far as the application for the optimal use of these panels that you'll be placing in the parking lot. So the angle for your panels the best angle is the southerly direction at I think it's 30 degrees, and right now we'll be directing either at westerly or easterly direction. Will the panels still be able to be the best wattage and usage at these different angles?

Mr. Munekiyo: Commissioner, maybe I can Ron Young, who is Johnson Controls representative to answer that question?

Mr. Ron Young: Chairman...

Chair Hiranaga: Please identify yourself?

Mr. Young: Oh, Ron Young, Johnson Controls. The panels are going to be degraded because of that angle of repose that they're put in, but the degradation isn't going to be that much, but it's all been factored into the 18 percent savings that the university's gonna have. It's just a matter of, you know, how far do you tilt panels on that carport structure and make it aesthetically appealing, appealing too.

Mr. Lay: Follow up. Okay, are these panels interlocked where you have...because we're talking about shade and that kind of thing.

Mr. Young: Yeah.

Mr. Lay: Can we turn it a little sideways just to give it a little more angle instead of being straight on with our parking stalls. You give it a little angle, maybe stagger it so we have a little, I guess, more optimal use of the sunlight? Because right now you're gonna go straight south --

Mr. Young: It's going north--yeah, north and south.

Mr. Lay: Yeah.

Mr. Young: So it's gonna be pointing east.

Mr. Lay: No matter what you still have that angle, yeah?

Mr. Young: Yeah.

Mr. Lay: Okay.

Mr. Young: Yeah, that's just the way the parking lot stalls go, so we're limited on that.

Mr. Lay: Okay, thank you.

Chair Hiranaga: Commissioner Wakida?

Ms. Wakida: How many panels totals are going up, and what are their sizes? I don't mean their linear feet, I mean the --

Unidentified Speaker: The wattage.

Ms. Wakida: The wattage, thank you.

Mr. Munekiyo: That's a Ron question.

Mr. Young: The panels are, right now are designed 235 watts per panel. I believe the size is about 30 inches by close to almost four feet.

Ms. Wakida: And how many total?

Mr. Young: I'd have to do the math. I know there's four panels per row and there are...the rows are 320 feet long. I don't have that number off the top of my head. I'd have to calculate that out, but it equates to 611 kilowatts.

Unidentified Speaker: ...(inaudible)...

Chair Hiranaga: No speaking from the audience please.

Mr. Lay: I have a question.

Chair Hiranaga: Commissioner Lay?

Mr. Lay: Okay, so we went through that first scenario. What if we change the direction of our parking so that we would get the southerly direction for placing our panels where we get the optimal use of our panels just changing the direction of our parking lot because we are gonna be going through there and we are gonna be doing some fixing and we just would switch the lines to a

different direction. Has that...have you guys thought about that?

Mr. Sakamoto: I'll just say a word about that. We were wanting to on the design sort of consideration of the installation of the PV panels were wanting to consider the integrity of the current design of the campus. You know, so that's a significant consideration for us so there's a huge amount of cost in terms of the design that's already been invested and so part of the parameters that we set out at the initial points was to use our current parking lot configuration. So changing the design would be --

Mr. Lay: More expensive.

Mr. Sakamoto: --you know, sort of starting from scratch and would decelerate, you know, our whole progress which we're urgently requesting be supported.

Mr. Lay: Understandable.

Mr. Sakamoto: Thank you.

Chair Hiranaga: Yeah, just a follow up. I mean, with the expense that you are proposing it would have seemed for optimum usage of those PV panels restriping of the parking lot should have been considered, but I'm sure you folks figured that out being a institution of higher learning.

Mr. Sakamoto: It wouldn't simply be the restriping, it would be really the reconfiguration of the tree wells, I mean, you know, we got a whole range of things involved.

Chair Hiranaga: Light stands.

Mr. Sakamoto: Right. A whole range of power kinds of considerations going into it, so it turned out not to be a simple thing. And in terms of degradation, you know, the improvements in the reorientation would not be terribly significant. So you know, we decided to go with our current design.

Chair Hiranaga: Thank you for that additional information.

Mr. Sakamoto: Thank you.

Chair Hiranaga: Commissioner Ball?

Mr. Ball: Clyde, is this system owned by the university or is it a joint venture or how is this set up?

Mr. Sakamoto: It will be a purchase of power agreement. And so, the documents are being reviewed as we speak and we're hopeful that our RPPA will signed very, very shortly, if not by the end of the day.

Chair Hiranaga: Commissioner Wakida?

Ms. Wakida: As far as the footings on the base of these pillars, what do you got in place to keep cars from backing into it--into the pillars? How are your pillars protected?

Mr. Young: There will be four steel bollards to protect them so that they will hit a bollard before they hit the pier.

Ms. Wakida: Okay, thank you.

Mr. Young: You're welcome.

Chair Hiranaga: Commissioner Hedani?

Mr. Hedani: I'm not sure who this would be for. It's just a question of whether or not the panels are hurricane proof?

Mr. Young: The panels are gonna be guaranteed for the wind load that they're designed for Maui.

Mr. Hedani: Is that a yes?

Mr. Young: As best I can...

Mr. Hedani: So they're wind loaded for how many miles an hour?

Mr. Young: 110 pounds.

Mr. Hedani: I'm sorry?

Mr. Young: I mean, 110 miles an hour.

Mr. Hedani: A 110 miles an hour?

Mr. Young: Yeah.

Mr. Hedani: Okay.

Mr. Young: And the panels are also warranted for either corrosive atmosphere for 25 years.

Chair Hiranaga: The 110 is so that it will stay fixed to the structure 'cause I mean the panels could become damaged during either flying debris so... You had a follow up, Commissioner Hedani?

Mr. Hedani: I separate question actually. I noticed that you preserved the aisles in the parking lot is that a reason for that or why didn't you cover the whole thing?

Mr. Young: Well, part of it is there are fire--some of them are fire lanes. So the Fire Department has to get their fire trucks through the parking lot to the buildings to access their fire lanes around the buildings.

Mr. Hedani: Okay, thank you.

Chair Hiranaga: Commissioner Ball?

Mr. Ball: On the structures themselves, what is the discussion you're having between the concrete and I didn't get what the other structures are made of?

Mr. Young: Okay, the original design was a structural steel hot dipped galvanized structure. And it was brought up after the design that we needed to look at some different alternatives because of the corrosive nature of the air, the salt air around here. So what we did is we started to look at precast so that number one, you have no really maintenance on it like you would the steel. So we're just going through that analysis right now on the cost difference because the material cost different on the precast is a little bit more than the steel, but then you have to factor the life cycle cost.

Mr. Sakamoto: And for the Commissioner's interest this was a consideration that we asked our consultants to review primarily because of our appreciation for the corrosiveness of that salt air coming at us. So that's one thing. The other reason, the aesthetics of the structure itself. So those two major considerations were asked to be reviewed.

Chair Hiranaga: Commissioner Shibuya?

Mr. Shibuya: Yes, thank you for your project and I see this as a leadership issue. Where you're transforming concepts into actual life quality opportunities. Opportunities for the community to learn about these new systems of renewable energy and transforming the University of Hawaii MC power-related utility costs into their actual delivery of instructional services. This is highly important and I think the more we can do this, I think that's the way we, Maui should proceed and thank you very much Maui Community College and David Tamanaha, thank you very much, and Stewart. I just wanted to ask a question here that was related with the Fire Department input. And I just needed a clarification and maybe that person is not here but I'll go ahead and ask it. They required a ten-foot buffer for combustibles to be provided around the entire PV system. What does that mean? Maybe the definition of combustibles needs to be clarified because many of the homes here on Maui have PV panels just like mine. I mean, it's on my roof. The roof is asphalt shingle and it's combustible. So I just wanted to know what does the Fire Department mean about ten feet buffer for combustibles?

Mr. Munekiyo: I think Commissioner what they were referring to are items such as LPG tanks which may be placed around buildings, but in the context of the parking lot, it's a fully cleared parking lot from a buffering standpoint. So that is why the applicant responded that that would not be a problem. There is really nothing in the proximity of those panels that would be of a combustible nature. It's very much open paved parking area.

Mr. Shibuya: Okay, so a combustible would be like the LP type gas tank as well as maybe loose leaves or i.a., paper or things of this nature?

Mr. Munekiyo: I'm not sure what they had in mind, but I think it was more of the, more obvious

kinds of combustible elements that Fire Department usually deals with. But somebody could include things which could be of a, you know, if they had a recycle bin for example in the area for cardboard that's something that probably would be considered in that category.

Mr. Shibuya: Okay, and if there is a electrical fire started by this or within this area the simplest solution there as you probably know is turn the switch off. Do you have such a emergency site where you can turn it off or have an automatic...if it shorts out, automatically cuts off or breakers break off.

Mr. Young: Yes, if it shorts out it will automatically trip.

Mr. Shibuya: So you'll have breakers on the panels itself as well as breakers within the main power source area?

Mr. Young: Correct.

Mr. Shibuya: And your inverters are micro inverters or are they string inverters?

Mr. Young: Micro inverters, no string inverters, that's right.

Chair Hiranaga: Commissioner Freitas, you had a question?

Mr. Shibuya: They're string inverters. They'll be in compliance with IEEE?

Chair Hiranaga: Okay, Commissioner Shibuya, let's limit our questions to two at a time because other Commissioners have questions.

Mr. Shibuya: Okay, thank you.

Chair Hiranaga: Commissioner Freitas?

Mr. Freitas: Yeah, this question's for Mr. Sakamoto. Mr. Sakamoto with the expansion of the university parking is becoming a problem and you have a limited parking space. The only thing that I foresee is going up, and with this PV panels on these units what would be the projection for parking. The only way I foresee is going up because of limited land space.

Mr. Sakamoto: That's a consideration. You're absolutely right. Given the current technology of combustion engine cars, we're...and that's why we're very, very interested in electric vehicles and reducing that footprint, but you're absolutely right, if the population grows we're going to have to go vertical in terms of our structures should our student population continue to increase. However, I think that what we're looking at is a whole range of possibilities. You know, about our education centers in Lahaina and in Hana, on Molokai, Lanai and ...(inaudible)... in Kihei. And so we're trying to distribute student access to education so that's one strategy. The other is, you know, we're I think probably right around the corner needing to be more aggressive about carpooling and organizing that, but parking will be an issue if we get too much further beyond say, 5,000 students or so on campus. The fact of the matter is we have 4,300 and about 82 students as of last week

or so, but many of these students are taking courses online, they're taking courses via interactive television so the parking situation is, we hope, going to be manageable going forward even as we grow.

Chair Hiranaga: Commissioner Lay?

Mr. Lay: This is again, about the photovoltaic system itself and the framework. With the properties, you know, in this area being very corrosive, what is the warranty on the panel and the framework itself?

Mr. Sakamoto: We're insisting that it be...the contract will be for 20 years, but the warranty we just heard is for 25 years.

Chair Hiranaga: Commissioner Tsai?

Mr. Tsai: No questions.

Chair Hiranaga: Commissioner Ball?

Mr. Ball: Do you have a contingency plan for during the construction for parking?

Mr. Sakamoto: I'm told that we are going to be renovating our parking area incrementally. So I think our initial discussions were around converting our rows individually, so one row at a time, but that's as far as I'm aware. Is that correct?

Mr. Young: Yes, that's correct.

Mr. Sakamoto: So that the impact on our parking rows would be minimized. We also have some space on our field. So that's been enlisted as well right behind our science building parking lot.

Chair Hiranaga: Commissioner Wakida?

Ms. Wakida: There was a comment by the Urban Design Board about considering alternative types of trees along the Wahine--

Mr. Sakamoto: Wahine Pio?

Ms. Wakida: Yeah. What alternative types of trees are you considering?

Mr. Sakamoto: Well, frankly, frankly we're slightly conflicted about that because we've invested over a 100 million in terms of buildings on our campus that we believe add to the aesthetic sort of view of what higher education on Maui ought to look like. And so, while, you know, we heard the comment from the board member at the Urban Design Review Board, our feeling is that we're wanting a buffer not obsecuration of our facilities. We want our public to see what higher education and what our facilities look like. So from our standpoint that there's value in the public passerby being able to see the college and being able to see what higher education on Maui looks like given

the kind of architectural vocabulary that we've introduced.

Chair Hiranaga: Commissioner Wakida?

Ms. Wakida: Well, I certainly understand what you're saying and I think the project is fantastic but I do think that the area needs some beautification. I mean, a parking lot in general, those--the trees that you're relocating are pretty skimpy trees and they will never be large beautiful canopy trees. And it could use some of that around in places and I hope there's an ancillary effort in this that you will put some effort into that kind of beautification.

Mr. Munekiyo: Commissioners, if I may ask our landscape architect because we did a fairly thorough discussion as to what the options might be in terms of trees and if I might have Mike Miyabara come to the mic and just provide some information on that?

Mr. Mike Miyabara: Good morning, Commissioners, I'm Mike Miyabara, landscape architect. To answer your question, we did consider...excuse me, the existing trees in the parking lot are autograph trees. For the most part we are gonna be relocating them out of the parking lot, but the alternate trees, some of the alternate trees we're looking at are for example, kamani, true kamani. We're looking at using native trees and of course, trees that can take the, can take the harsh conditions out there. We all know how windy and salt...salt laden winds there are. So that's kind of the trees we're looking at, kamani. And kamani trees can get fairly large and create some shade. But we also do, are aware of, you know, keeping some visibility, you know, to the campus itself as Mr. Sakamoto had alluded to. For this particular project the concern was to have some buffering along Wahine Pio with some smaller trees, again, adapted to the site and some low shrubbery just to, you know, to screen some of the parking areas.

Ms. Wakida: Yes, thank you. I think that any landscaping you do really does enhance the buildings that are there and it shows them off rather than looking so stark. So thank you.

Mr. Sakamoto: Thank you for that. The other consideration that we're asking the landscaper to consider is maintenance. We want to repurpose as effectively as we know how resources to education and so we wanna balance our long-term commitment for the maintenance side of the equation to make sure that we're undertaking an undue sort of burden with respect to the maintenance of all of the landscaping that's going on. So that's a consideration for us as well. Thank you.

Chair Hiranaga: Any other questions, Commissioners? Commissioner Hedani?

Mr. Hedani: I think this will be for Johnson Controls. The efficiency of the panels degrades over time because of UV exposure or whatever. At a certain point in time what is the percentage of efficiency that's lost and at that particular point in time are the panels gonna be replaced by the provider?

Mr. Young: That's a very good question. Yeah, it is true that they are gonna degrade over time, but with the maintenance structure that's put in place to keep them clean on a monthly basis that degradation's not gonna take...have a major impact like a lot of panels we've seen in the past

because we've done a lot of case studies on different maintenance programs on panels and how that affects their life span. As far as degradation, over the long, over the 20 years, I really don't have an answer for you on what that percentage is and...

Chair Hiranaga: Why don't you...are you finished with your statement?

Mr. Young: Yes.

Chair Hiranaga: Okay. Commissioner Hedani?

Mr. Hedani: The reason I was concerned was that I heard that panels can degrade as much as 85 percent over time. Is that the case with these panels?

Mr. Young: Well, the panels that we're getting are pretty premium panels. You can hardly find any panels that are warranted for 25 years.

Mr. Sakamoto: Let me just chime in here, what we have --

Chair Hiranaga: Clyde, could you speak into the mic please?

Mr. Sakamoto: What we have here is a performance guarantee. And so, should the panel degrade to a level that where it's not meeting the performance metrics that are part of the contract then Johnson Controls and its subsidiaries will replace the panels or bring it up to the point where they're meeting that performance metrics.

Chair Hiranaga: Commissioner Shibuya?

Mr. Shibuya: Maybe I can help? From the actual standpoint, one of my arrays was installed in 2004, and I knew about the possible 2 percent degradation, but not 85 percent, and because of the intensity of the sun, I live in Kula, I have clouds too, it has not decreased, it has increased and suspect, and this is only my opinion, it has increased because of the global warming issue.

Chair Hiranaga: Any other questions, Commissioners? Commissioner Tsai?

Mr. Tsai: I applaud you guys for this great job, project. My only question is looking at the schedule, you guys were going to complete this by the end of 2012. As much as I like to see this get done at soon as possible in two months is that really reasonable?

Mr. Munekiyo: I think that's a very good point. We are needing to go through a couple of processes with respect to concluding the PPA. The goal initially was to have it completed by the end of the year. I think to the extent that we can do that, we will strive to do that. If it spills over into next year then I think that's something that we understand that could be a reality as well.

Chair Hiranaga: Any other questions, Commissioners? Seeing--oh, Commissioner Hedani?

Mr. Hedani: Yeah, I'd like to congratulate the college on making a great presentation and coming

up with a fantastic concept and the added benefit that Clyde will have is that he can actually charge the students more for covered parking now.

Mr. Sakamoto: That hadn't occurred to us, but it's a very good suggestion. We have no plans to do that.

Chair Hiranaga: Commissioner Shibuya?

Mr. Shibuya: I understand that it is a string inverter and you're talking about high voltage and you will be complying with the County Electrical Codes I assume.

Mr. Young: Yes, we will.

Mr. Shibuya: Okay, thank you. And you will also post signs that this is not like a 110 volts, this is DC very high voltage?

Mr. Young: Yes, there'll be caution signs, hazard signs for that type of installation.

Mr. Shibuya: Just in case some curious people would try to connect to it, it's not advisable.

Mr. Young: Yeah.

Mr. Shibuya: Yes, thank you.

Chair Hiranaga: Commissioner Freitas?

Mr. Freitas: For Johnson Control. ...(inaudible)... was the big PV panel manufacturer they're out of business, they're down the road, you guaranteeing these panels for 25 years. If the manufacturer goes out of business, will you folks replace it if there's a problem with another manufacturer and I know Johnson Control, I know you folks are a solid company, you're not a ...(inaudible)... I understand that.

Mr. Young: Yeah. No, no matter what happens we will replace those.

Mr. Freitas: Okay.

Chair Hiranaga: Any other questions, Commissioners? Seeing none, thank you very much. We'll call for the staff recommendation.

b) Action

Mr. Dias: Thank you, Chair. Before I give my recommendation, there's a slight change that we'd like to make to Condition No. 4. We'd like to add the words, "and presented before the Maui Planning Commission on September 25, 2012." So the whole condition would read, "That final construction shall be in substantial compliance with preliminary plans received by the Department of Planning on July 3, 2012, and presented before the Maui Planning Commission on

September 25, 2012.” And the reason for that is as we discussed throughout this presentation, when the applicant originally came to us they were just proposing the metal structures and now they’re considering the concrete ones. So we just wanna add that to not add any confusion in the future. So with that, the subject application is in compliance with the applicable standards for a Special Management Area Use Permit, and therefore the Maui Planning Department recommends approval subject to 11 standard conditions and 4 project specific conditions.

Chair Hiranaga: Thank you very much, I’ll open the floor to a motion. Commissioner Tsai?

Mr. Tsai: Yeah, I move to accept the...as it was stated.

Mr. Freitas: Second.

Chair Hiranaga: Staff recommendation as stated. Seconded by Commissioner Freitas. Discussion? Commissioner Lay?

Mr. Lay: At this point, I’d like to commend Clyde and the university for all their efforts in reusable energy. I recently had a chance to take a look at their new science building, you got wind turbines on the top, you’re using second-hand lighting coming in and you got this project coming along. It shows the public out there that educating our kids out there in what we can do and what we will do, it’s a great thing.

Chair Hiranaga: Any other discussion? Commissioner Shibuya?

Mr. Shibuya: I just want to add to the compliments here of the University of Hawaii’s Maui Campus, vision in terms of transforming concepts that they teach and actual life type examples here on how to generate electricity and also to ensure that we have dual use of the land space that we have, the land that Maui has is very finite and we need to have dual uses of our resources as much as possible, and this is a shining example of dual uses. Thank you.

Chair Hiranaga: Any other discussion? Seeing none, I’ll call for the vote or I’ll have the Director restate the motion.

Mr. Spence: The motion is to approve the SMA Permit with the conditions as recommended by Staff.

Chair Hiranaga: All in favor so indicate by raising your hand.

Mr. Spence: That’s eight ayes.

Chair Hiranaga: Motion carries. Thank you very much.

It was moved by Mr. Tsai, seconded by Mr. Freitas, then

VOTED: To Approve the Special Management Area Use permit as Recommended by the Department.

**(Assenting - M. Tsai, J. Freitas, D. Domingo, I. Lay, W. Hedani, K. Ball,
P. Wakida, W. Shibuya)**

Chair Hiranaga: We'll take a five-minute recess.

Mr. Munekiyo: Thank you very much.

A recess was called at 9:47 a.m., and the meeting was reconvened at 9:54 a.m.

Chair Hiranaga: Moving onto Agenda Item B-2. Director?

Mr. Spence: Commissioners, Item B-2 on your agenda this morning is Kenneth and Anjali Desure and Dani Nuesca requesting a State Land Use Commission Special Use Permit to operate a B&B Maui Ocean Breezes Bed and Breakfast in the Ag District on Holokai Road. Our Staff Planner this morning is Mr. Joseph Prutch.

- 2. KENNETH and ANJALI DESURE and DANI NUESCA requesting a State Land Use Commission Special Use Permit in order to continue to operate a bed and breakfast known as the Maui Ocean Breezes Bed and Breakfast on approximately 2.21 acres of land in the State Agricultural District at 240 North Holokai Road, TMK: 2-8-004: 104, Haiku, Island of Maui. (SUP2 2012/0004) (J. Prutch)**

This is for a three (3) bedroom bed and breakfast home where two (2) guest rooms are located within the main farm dwelling and one (1) guest room is located within the second farm dwelling.

Mr. Joe Prutch: Thank you. Thank you, Chair, Commissioners. Good morning to everybody. The applicant is requesting a State Land Use Commission Special Use Permit to operate a three-bedroom bed and breakfast within a main farm dwelling and a one-bedroom second farm dwelling. The property is about 2.2 acres located at 240 North Holokai Road about a half-mile makai of Hana Highway. The lot is a basically rectangular in shape. It's pretty much level except for the rear of the property has a steep gulch. The property is surrounded to the north, east and south by other agricultural lots with farm dwellings and to the west across the street is agricultural land, sugarcane. The property is built with a main farm dwelling, two-story with four bedrooms in which two, the bottom two bedrooms are being used for the guests, the top two bedrooms are being used for the property owners and then there's a one-bedroom cottage at the rear of the lot that's gonna be used or is being used for the bed and breakfast guests.

Now let me go into some history of this project as this application is a Special Use Permit application for the project that's already an existing bed and breakfast. Anjali Desure is the applicant. She already has Maui Ocean Breezes which has been in operation since I believe late 2001. Since she's been operating she's had...we don't have...we have no complaints from the Police Department. I have police records in here, there's been no complaints and we don't have any RFS, Request for Services on her property since it began. So what happened history wise, let me just kinda explain this a little bit so you understand why we're here for a Special Use Permit,

a new application and not just a renewal of a Special Use. Back in 2001, the applicant received a Special Use Permit and Conditional Permit for a TVR. She got her application, she got her approval, she got her approval for the Special Use Permit with a one-year expiration or expiration of the Conditional Permit date whichever was later. When the Conditional Permit was approved later that year, they approved the Conditional Permit until November of 2006. So technically her Special Use Permit was valid until 2006. A year later she decided to amend her application permits and add on I believe it was the cottage to add a third room. So she went through the process, through the Special Use Permit renewal or amendment and Conditional Permit amendment. She got approval for that from Planning Commission for the Special Use Permit in March of 2002, and at that time the permit said it's only valid till November 2006, not November 2006 or Conditional Permit date. For whatever reason it happened I don't know, but that's what it was. Then a few years later she finally got the approval from the Council to amend her application and they gave her till November 2010 which she was assuming that her Special Use Permit was valid until November 2010 as well to coincide with the Conditional Permit. Of course, the B&B Ordinance came along later. I think the end of 2008. When that came along, she decided to convert from a Conditional Permit to a B&B Permit. We did that in June of 2009, she got the B&B Permit and that was set to expire in July of 2012 this year. And the Conditional Permit was just let go and let expired, it disappeared, it was no longer needed 'cause she had the B&B Permit. When she came in recently to renew her B&B Permit that's when it came to notice that the Special Use Permit had expired, she had forgot to renew it, and at that point we couldn't renew something that expired a couple years before, so at that point we just let her know that we need to you to apply again, get a new Special Use Permit. Your B&B is still valid, we'll keep that going and that's where we are today. That's why we're back here again today. I sent the application out to Police, Office of Planning and Land Use Commission. Police responded and their response letter essentially said in summary that there was no objections to approval of this project. Like I said, she's been operating for over 10, 11 years now and we do not have any complaints her process, her business. She does, of course, have a farm plan that was approved in June of 2009. Our Department of Planning letters showed that it's been implemented and it shows that approximately 55 percent of the property is devoted to either coconut trees, fruit trees, palm trees, papaya trees, bananas and tropical flowers and the fruit is either eaten by the owners or a lot of it is supplied to the guests for breakfast. That's all I have for the moment. The applicant is here, Ms. Anjali Desure, Mrs. Anjali Desure is here and the other owner, Mr. Dani Nuesca is here as well. They're here to answer any questions that I may not be able to answer, and I'll go through the recommendation report later if that's okay?

Chair Hiranaga: Thank you. At this time, I'd like to open the public hearing.

a) Public Hearing

Chair Hiranaga: Is there anyone here that wishes to provide testimony regarding this agenda item, please come forward? Seeing none, the public hearing is now closed. Open the floor to questions from Commissioners. Seeing, seeing ...oh, Commissioner Hedani?

Mr. Hedani: Joe, is there a requirement as part of standard conditions somewhere that the lighting on the project be down lit? I thought it was a standard condition for SMA things. This is not an SMA application, but is there a requirement that they have down lighting on the property?

Mr. Prutch: There's not with the Special Use Permit. I'm trying to remember the B&B. I don't believe there is a requirement because there's no construction going on.

Mr. Hedani: It would be just compliance with County Codes?

Mr. Prutch: Uh hmm. I don't think there's a requirement. I don't believe there's a condition for down lighting in the B&B Permit as well. There's definitely not in the Special Use Permit.

Mr. Hedani: Okay.

Mr. Spence: Mr. Chairman?

Chair Hiranaga: Director?

Mr. Spence: I believe just answering Mr. Hedani's question about down lighting. It's now County Code that all lighting be downward facing be shielded. So regardless of whether it's a requirement of SMA or a B&B or a Special Use Permit, everybody has to do that anyway.

Mr. Prutch: Thank you.

Chair Hiranaga: Commissioner Lay?

Mr. Lay: I'm looking at the location map. Where is it exactly as far as giving an idea of where it's located?

Mr. Prutch: Please tell me which exhibit you're on? Exhibit 1 or 2, Exhibit 3, is it?

Mr. Lay: Yeah, Exhibit 3, but I don't see a pinpoint. I'm just trying to figure out where it's --

Mr. Prutch: Oh, maybe the copy didn't go out well. If you head from Hana Highway makai on North Holokai--

Mr. Lay: Yeah.

Mr. Prutch: Just when you get past what is that street there, Kapuamolu [sic], Kapuamula [sic], I can't see it. That intersection there, it's the second house on the right.

Mr. Lay: Okay, the darkened area?

Mr. Prutch: It's the darkened area. I didn't know if it came out on your copy or not.

Mr. Lay: I gotcha.

Mr. Prutch: And she has basically three properties adjacent to her and then across the street is the cane fields.

Chair Hiranaga: Cane fields?

Mr. Prutch: I haven't received any testimony from any neighbors on this project at all.

Chair Hiranaga: Did you say cane fields?

Mr. Prutch: Yeah. I believe it's cane field across street isn't it? I thought it was.

Chair Hiranaga: If you're going to speak please come forward and identify yourself?

Ms. Anjali Desure: Thank you for your precious time and I'm grateful to be here.

Chair Hiranaga: Please identify yourself?

Ms. Desure: My name is Anjali Desure. The answer about the cane field is that it used to be pineapple, and then this guy bought it and he converted it into seven different lots and then economy went bad and so nothing is happening there now.

Chair Hiranaga: Sitting fallow. Thank you. Commissioner Wakida?

Ms. Wakida: Good morning. It's mentioned in here that you have a farm plan. Could you tell us about your farm plan?

Ms. Desure: Yes, we bought the house in 1999, July. And it was pineapple, all pineapple before so it was just raw land with a house and a workshop on it. We planted about I'm not sure about the exact number of how many coconut palms we have. We have about 30 to 50. I'm not very good with counting and then we have those manillas. We have about 30 manillas and we have keikis, the manillas do have keikis so I give...I don't sell the keikis, I give the keikis to people that are building new houses. You know, they need a farm plan so I just give them away. Then we have lots of papaya because we really...our dream was to live in Hawaii and eat papayas and the local limes. So we have that. And Dani can more answer that because Dani is the one that did everything for me, since 14 years ago. He's the guy with the green thumb and me and him had worked together. And then I've got local oranges. I've got local limes that are, you know, not the Meyer limes but the good ones, and I have jack fruit and the of course, tons of bananas and coconuts, tons of coconuts. I have tons and tons of coconuts. We thought of selling them on off the Hana Highway. We made a sign and sat there, but it's not worth it. So we just...sometimes Micronesians come by and they say can I get your coconuts? So they just drive up in their truck and I say, okay, take some coconuts because otherwise they're gonna fall on people heads.

Chair Hiranaga: Okay, thank you very much. Commissioner Lay?

Mr. Lay: I have a question about your septic system. Okay, with this bed and breakfast going in and additional people staying there is this septic system adequate and what type of system is it for this, this develop, this project?

Ms. Desure: Yeah, the septic is for a five-bedroom home. And we did not put it in. When we

bought the house in 1999, the house was built in 1996 and 97 and the guy was doing vacation rentals then. So since then we've had it pumped twice. And it does great, it is doing well and we put the bacteria in it.

Chair Hiranaga: Thank you.

Mr. Lay: Follow up.

Chair Hiranaga: Commissioner Lay?

Mr. Lay: Does this include a leach field or is it just a holding tank?

Ms. Desure: Oh, yes. There is a leach field and we don't plant anything on that leach field.

Chair Hiranaga: No further questions? Commissioner Wakida?

Ms. Wakida: Yeah, the farm plan if this is the applicable one says that 50 percent of the parcel is under Ag or Ag Conservation. What would you say in this case how much is under--

Mr. Prutch: In Ag Conservation?

Ms. Wakida: Ag cultivation.

Mr. Prutch: Oh, cultivation, I'm sorry.

Ms. Wakida: Or Conservation, but cultivation.

Mr. Prutch: Well, even the rear part where the gulch is it's pretty steep. It's got...I went out there and did a site visit and looked down and it's full of mostly banana, avocado and papaya down in the gulch. So even the gulch is being used. I don't know if it's in Conservation or not, but it's actually being used for fruit. The whole driveway is all coconut on either side and the large portion of the lot on the north side, that flat area mostly coconut and various fruit trees and the jack fruit and palms, that kind of stuff. I would say at least of the lot was full just by my site visit, by looking around the property, it looked like it was being used what it needed to be used for.

Ms. Wakida: Thank you.

Mr. Prutch: You're welcome.

Chair Hiranaga: Commissioner Shibuya?

Mr. Shibuya: This is a question directed to Anjali, please? Anjali, do you have any intentions or possibilities of putting in some renewable power generators? As we just discussed on the previous application, they were putting it in. Are you thinking of something very similar?

Ms. Desure: Actually it was a sign from God. When I came in and they were talking about solar

panels and then they were talking about how they...whether they degrade over time or not and things like that, you know, and I have had estimate done from this one guy and he said that you have go before the Maui Electric Company, they have to approve it because there's too many people in Haiku getting that. So the Maui Electric Company has a limit on it. So I was waiting, so if I get the permit, you know, then I feel secure, right so I can invest the money and I want to do solar, yes, because my electric bill is...you know?

Chair Hiranaga: Thank you.

Mr. Shibuya: Thank you.

Chair Hiranaga: Commissioner Freitas?

Mr. Freitas: Anjali, please? I have a problem with this farm plan. They say 50 percent should be generated farm. How many pounds did you say a month of fruit and vegetables that you generate, not trees that you give away?

Ms. Desure: You mean in terms of actual fruit?

Mr. Freitas: Yeah, pounds, yeah?

Ms. Desure: Palms?

Chair Hiranaga: Pounds.

Ms. Desure: Pounds not palms, okay. I don't...it is not a whole lot. We get a ton of limes. I have not ever weighed it. We get citrus, you know, oranges. We get tons of bananas. Tons, but I haven't sold any. I haven't sold any. I cannot honestly answer that.

Chair Hiranaga: Commissioner Freitas?

Mr. Freitas: Tons relate to 2,000 pounds is a ton.

Ms. Desure: No, not, not, no, no not that kind of measurement. I mean, when I say...I'm just using a figure of speech. We get a lot and we give it to the guests. Sometimes the Micronesians drive by looking for work. They want to pick fruit or mostly coconuts. I let them take it. I grow a lot of palms from keikis and people are building their house and they need the ag so I give them. I haven't really sold anything. I never weighed anything. I can't honestly answer that question.

Chair Hiranaga: Commissioner Freitas?

Mr. Freitas: Anjali, I have a problem with these farm plans because I grew up on a farm and I know what farming relates to. You cannot what you call make a living off, what you call, an acre of farm unless you're growing marijuana. You know what I mean? So what you call, I can relate to that.

Ms. Desure: You're right, sir. I cannot make a living from the fruit I grow on there, absolutely not.

We tried selling on the side of the Hana Highway, we stopped.

Chair Hiranaga: Commissioner Lay?

Mr. Lay: This is on your neighbors. Do we have any follow up on your neighbors and how they feel about, you know, you opening this up, this facility. Any response from them?

Ms. Desure: I started --

Mr. Prutch: Like I said, I have not received any testimony from any neighbors since this hearing notice went out. I do know right next door to her on the north side is Mr. Ludwig's bed and breakfast so there's an existing B&B next to her as well that I think went through the Planning Commission, I don't know when, but that one. And then the other two neighbors, I've heard nothing.

Mr. Spence: Comment, Mr. Chair?

Chair Hiranaga: Director?

Mr. Spence: Just as a little bit of a follow up. This bed and breakfast has been operating since 2001, and went through the larger conditional permitting process, Conditional Use process and everything, so normally if there are problems, I mean, we would hear about it, but usually when you have a public hearing and you send out a notification, if there's issues, boy they...neighbors would take advantage and come out and let you know.

Chair Hiranaga: Commissioner Shibuya?

Mr. Shibuya: Joe, maybe you can help me on this one. I'm looking at the density of the bed and breakfasts in this area and it's not marked here on the map or whatever Exhibit 3 there is, perhaps you can tell us from your memory where some of these B&Bs and TRVs are located so we can cross them off or maybe you can project it or show us?

Mr. Prutch: Sorry I don't have those projected, but I did look it up yesterday in anticipation. Like I said the Ludwig, I don't know the name of it, but the Ludwig one is right adjacent to her on the north side, so her adjacent property. I did a search on our GIS system and I did a 500-foot circle, there was no one else in between. Then I expanded the circle out to a half mile. There was still no one in between there. So I did a half-mile search and there was only the one B&B next to her, nothing else and that's as far as I went 'cause I figured that's a pretty good range. But in the future I can--I think I've done that in the past, and I think it is helpful to have a large map that shows kind of where they are, and I'll remember to do that in the future. I did do it yesterday, but it was too late to--

Mr. Shibuya: Thank you very much, Joe. Thank you.

Chair Hiranaga: Any other questions, Commissioners? Seeing none, ready for the staff recommendation.

b) Action

Mr. Prutch: Okay, this application for a State Land Use Commission Special Use Permit complies with the applicable standards of all five unusual and reasonable uses within the State Agricultural Districts which are all spelled out within the recommendation report. As such, the Maui Planning Department recommends to the Maui Planning Commission approve the State Land Use Commission Special Use Permit subject to the seven standard conditions located in your report including of course, an expiration date of July 31, 2017, and the reason for that is to coincide with the existing Bed and Breakfast expiration date so she can come in at one time next time and apply for renewal for both. That's it, thank you.

Chair Hiranaga: I'll open the floor to a motion. Commissioner Ball?

Mr. Ball: Motion to approve the Special Use Permit to operate B&B in County Ag zoned district.

Mr. Hedani: Second.

Chair Hiranaga: As recommended by Staff?

Mr. Ball: As recommended by Staff.

Chair Hiranaga: Moved by Commissioner Ball, seconded by Commissioner Hedani, any discussion? Seeing none, Deputy -- Director, could you please restate the motion?

Mr. Spence: The motion is to approve as recommended by Staff.

Chair Hiranaga: All in favor, so indicate by raising your hand.

Mr. Spence: That's eight ayes.

Chair Hiranaga: Motion carries.

It was moved by Mr. Ball, seconded by Mr. Hedani, then

**VOTED: To Approve the State Land Use Commission Special Use Permit as Recommended by the Department.
(Assenting - K. Ball, W. Hedani, D. Domingo, J. Freitas, I. Lay, M. Tsai,
P. Wakida, W. Shibuya)**

Mr. Prutch: Thank you.

Chair Hiranaga: Congratulations.

Ms. Desure: Mahalo.

Chair Hiranaga: Let's take a ten-minute break.

A recess was called at 10:16 a.m., and the meeting was reconvened at 10:23 a.m.

Mr. Spence: Commissioners, we're on Item C, No. 1, Mr. Kyle Ginoza, Director of Department of Environmental Management requesting comments on a Draft Environmental Impact Statement on an SMA Permit and Shoreline Setback Variance for the proposed Wailuku-Kahului wastewater reclamation facility shoreline protection extension, and our Staff Planner today is Mr. James Buika.

C. NEW BUSINESS

- 1. MR. KYLE GINOZA, Director, DEPARTMENT OF ENVIRONMENTAL MANAGEMENT requesting comments on the Draft Environmental Impact Statement (EIS) prepared in support of the Special Management Area Use Permit and a Shoreline Setback Variance for the proposed Wailuku-Kahului Wastewater Reclamation Facility Shoreline Protection Extension at 281 Amala Place, TMK: 3-8-001: 188, Kahului, Island of Maui. (EAC 2012/0019) (SM1 2012/0004) (SSV 2012/0003) (J. Buika)**

The Mayor will be responsible to accept the Final Environmental Impact Statement.

The public hearing on the Special Management Area Use Permit and the Shoreline Setback Variance will not take place until after the Chapter 343, HRS process has been completed.

Mr. James Buika: Good morning, Chairman Hiranaga, Planning Commissioners, Planning Director Spence, Deputy Director for Public Works, Corporation Counsel. My name is Jim Buika. I'm a Planner with the Planning Department, and by way of introduction, this project, proposed project is a very important project for Maui County. However, it will be constructed in the very environmentally sensitive area along the shoreline fronting the existing Wailuku-Kahului wastewater reclamation facility in Kahului. Thus the Draft Environmental Impact Statement before you describes the potential impacts to resources but it also describes the best management practices that will be employed as part of the project to minimize any residual impacts. The purpose of the project is to further protect the reclamation facility from advancing coastal erosion and coastal storm surge, the occasional coastal storm surge that is now threatening components of the facility. These hazards will be mitigated by the proposed project. With the Chair's permission, I would like to first describe in two slides just the EIS process today and then I'll turn it over for a presentation by the applicant's representative, Mich Hirano to further describe the proposed project and then we can answer questions and comments. Let's proceed.

So the planning process before the Planning Commission today is we're reviewing the Draft Environmental Impact Statement only. We'll have a brief presentation and then the Maui Planning Commission is a commenting agency focusing on the potential impacts to the environment and asking the applicant to include additional information in the Final EIS. Again, the Draft EIS it is an informational document that is the basis for other required permits that will follow the EIS. The Final EIS will answer all of the Maui Planning Commission and other agency comments to the satisfaction of the Maui Planning Commission and the other commenting agencies. The Mayor of

Maui County is the final authority to accept the Final EIS with the Director of Department of Environmental Management as the Mayor's authorized representative in this case. And at a future date, the Maui Planning Commission will hear a Special Management Area Use Permit, Major Use Permit and a Shoreline Setback Variance because part of the project is in the setback area in front of the reclamation facility. So the information contained in the Final EIS will be incorporated into these permit applications, used as the basis for those permit applications.

Just some other introductory notes then I'll turn it over for the presentation. The Planning Department will write up these notes from today, we'll record the notes and the Planning Department will also add any additional formal comments as necessary to the Draft EIS for inclusion, for completeness. On August 12, 2012, the applicant transmitted the EIS, Draft EIS along with the SMA Use Permit and Shoreline Setback Variance application to 70 agencies and organizations for comment. So those comments are being received right now by the applicant and Department of Environmental Management and will be and answered as part of this process. The Draft EIS was published on August 23rd in the Office of Environmental Quality Control, Environmental Notice Publication which is online for public comment and the deadline for public comments is due on October 8, 2012. And finally, our role today, my role will be to document today's proceedings and document any of your...record any of our comments and additional requests for information to be included in the Draft EIS as part of the written record. So unless there are any other comments on the process, I'll turn it over to Mich Hirano representing the applicant for a short presentation about the project.

Mr. Mich Hirano: Thank you very much, Jim. Good morning, Chair Hiranaga and Commissioners. I'm Mich Hirano with Munekiyo & Hiraga. We prepared some background information on the project before you today. Just like to introduce the project team. The applicant is the County of Maui, Department of Environmental Management and Director Ginoza is here this morning to answer any questions after our presentation as well as the project engineer, Juan Rivera. We have the coastal engineer, Moffett and Nichol and Russ Woodrow and Aaron Holloway are here this morning as well to discuss and answer any questions the Commissioners may have. We have Colleen Suyama from our office, Munekiyo & Hiraga, Senior Program Manager who has been working on the project. The marine biologist and flora-fauna consultant was AECOS, Inc., and the archaeological consultant was Xamanek Researches, Erik Fredericksen.

Our presentation is in two parts. I'm going to give some background information to the Commission as well as just discuss the project and alternatives that were considered, and discuss the impact areas that were investigated in the EIS. And then I'm going to turn the presentation over to Russ Boudreau, who would give the description of the coastal processes and characteristics of the project area that kind of influences the design solution and as well, to discuss potential impacts and mitigation of the project.

In terms of just the orientation for Commissioners. The Wailuku-Kahului wastewater reclamation facility is located on the coastal shores of Maui just to the east of Kahului Harbor. This is Kanaha Pond so it's just to the west of Kanaha Pond and as well, to the west of the wastewater reclamation facility is Kanaha Regional Park or Kanaha Beach Park. The project site is an approximate 19-acre area. Some of the features on the project site are the...there's the retention pond, there's an operations building. This is the tanks building where the sewage is treated. And this is the

headworks building where the raw sewage is put into place. The project site is accessed by Amala Place and Amala Place is also accessed by Hobron Road via Hana Highway which is just off to the bottom of the screen.

In terms of just the background and the problem, the wastewater reclamation facility was built in 1973, and it serves and treats the sewage from Central Maui's communities including Wailuku, Waiehu, Waikapu, Kahului, Spreckelsville and Paia. So it covers a...services a very large area of Central Maui. It's a very critical facility to maintain and to protect. The project site as you can see it's located on the shoreline on the north shore of Maui susceptible to shoreline erosion. This is very evident from the very beginning almost from the time it was built. It was built in 1973, and in 1979, the County of Maui had asked the Army Corp of Engineers to do a coastal study on the erosion and proposed alternatives and measures to protect the coastline from erosion fronting the wastewater reclamation facility. So in 1979, the Army Corp of Engineers did a study on the erosion at the facility and they had recommended to protect the shoreline with a revetment, a rock revetment which is a really a protection, slope protection along the beach berm. They initially had suggested the whole frontage along the wastewater reclamation facility be protected. It's approximately 1,500 feet of ocean frontage. However, the funding for the project was very limited. They only had \$250,000 available for funding at that time and they built 450 feet of revetment and that revetment currently protects and is in front the retention lagoon. The shoreline continues to erode in that area. Its average erosion rate is approximately minus 2.4 feet per year and at that rate, the existing facilities are in danger of being undermined by erosion, by the coastal erosion and really the--if you take the worse case scenario it could be susceptible to erosion in one to two years. The erosion rate ranges from -2 feet per year to a maximum of 6 feet per year. So if you take that worse case scenario, it's not a very long time frame before the facilities are in danger of erosion.

Some of the options that were considered with respect to the problem. In 2005, the County of Maui, Department of Environmental Management did a extensive study with a lot of community involvement with a community advisory group to look at some of the alternatives for the facility. And these alternatives range from relocating the facility. There were four inland sites that were identified to relocate the facility to as well as a number of shoreline protection options which included groins and as well, shoreline revetments, structures and sand nourishment or beach nourishment as alternatives. The option to relocate was a very expensive option. It's in the order of \$219 to \$269 million. Those funds were not available. The other option was then to protect the existing facility or the no build option or the no project option, and the no project option was not acceptable because of the critical infrastructure service that the wastewater facility provides to the Central Maui communities. So the Council had adopted a resolution at that time and the resolution was really twofold. It was to protect the existing facility, to mitigate the shoreline erosion, and as well there was another motion by the Council to carry out tsunami protection improvements. And the tsunami protection improvements have been completed and now it's the Department of Environmental Management is coming forward with a proposal to protect the shoreline from erosion.

In terms of the shoreline erosion and the measures to protect the existing facility, a number of options or alternatives were considered. The two options that...alternatives that were originally considered in the Environmental Impact Statement preparation notice which was a preliminary scoping document to the Draft Environmental Assessment, and this was done, the Environmental

Protection Notice went...was published in January 2011, and the alternatives that were looked at was to build a revetment, to extend the revetment that is there that was built in 1979, by the Army Corp of Engineers was to extend that revetment along the beach scarp which is really the eroding face of the beach bank and that was a 1,200-foot westward extension of that existing revetment and the revetment was really rock, big boulders that were placed on the bank to stabilize the bank and to protect the bank from erosion. And then there were landward returns short pieces of revetment that were extended on the east and west sides of the revetment at the ends of the revetment to protect it from what they call flank erosion where the waves would come around the revetment and scour behind the revetment and take away the earth. So they put what they call flanking revetments to protect the ends of the revetment. The other alternative that was looked at at that particular time was to build the revetment with beach nourishment and the beach nourishment would, you'd still build the revetment but you would bury it between or behind beach sand and approximately 130 cubic yards sand was being proposed for the nourishment piece of it. During the review of the Environmental Impact Statement preparation notice when these alternatives were being presented a number of comments came up from the recreational users as well as from the Department of Planning looking at another alternative of pulling the revetment inland as far as possible so that it would maintain the existing beach as much as possible and have an inland retreat. So we looked at that alternative. It looked very practical and so that is the alternative that is now being proposed as the preferred alternative and this alternative would be an inland...it would transition from the existing revetment approximately 400 feet along the beach and then go inland on the wastewater reclamation site and be buried inland so the existing natural beach that is landward of the revetment will stay as it presently is. So we just have some slides of these. This is the revetment that is along the beach scarp that was being proposed as in the Environmental Impact Preparation Notice. As You can see in the lower right-hand screen this is the existing 400-foot revetment and the proposed protection would be very similar this. It would be very large rocks just placed on the bank to stabilize the bank and to, as well, absorb the wave energy as it comes onto the shoreline. This is the existing 450-foot revetment and the idea would be to extend this on the western flank just to bring it inland to prevent scouring behind this revetment and then to extend it along the beach scarp approximately 1,200 feet along the full frontage of the wastewater reclamation facility property and then again, to bring it inland on the western end of the revetment. The other alternative that was considered was the beach nourishment alternative and again, the revetment had that very similar alignment along the beach scarp but what you have in front of the revetment is approximately 130 cubic yards of sand that would be used to bury the revetment and to be available for I guess erosion and to protect the revetment until it erodes away but eventually the coastal processes would take the sand and move it down current.

And then...so this is the inland revetment alternative. This is a plan view we're looking down on top of it. This is the existing Department of Army revetment that was built in 1979, so this preferred alternative would transition from the existing revetment, extend it westward along the beach scarp because really it's unavoidable to really avoid this area because we had to tie into the existing revetment. And then at this point go 400 feet and then start retreating inland. And as you can see, this is the existing beach scarp and so it would be inland from that beach scarp and aligned across and protect these areas of the wastewater reclamation facility and then again, the landward returns on both the west side and the east side. And this plan view would, the revetment itself, this is the full width of the revetment, but most of it would be buried. You wouldn't see. It would be very

similar to the existing revetment. This would be buried, this is the toe, would be buried and this whole area that's on the land would be buried. And then to account for sea level rise, the revetment, the existing revetment would be raised by three feet to account for sea level rise and global warming. So that would be the kind of the extent of the project as it's being designed today.

And we just give you some renderings of the existing site and what it might look like from the ocean side looking onto the revetment from the ocean in these next two slides. So this is the existing facility, Amala Place, the tanks building, the headworks building, and the sewage plant operations, the retention lagoon. This is the existing 450-foot revetment and then this is the shore as it is today. And then with the revetment it be very, I guess, discreet. This is the existing revetment. There'll be a inland return on the west side. There will be as well, stairs that will be built into the revetment on the west side to allow for lateral access across the revetment. There is a pathway behind the revetment right now. And that will be maintained to allow for lateral access along the beach. And this area is also used by fishers. And then this is where the new revetment will be extended along the existing beach scarp and then it will retreat inland and come back up in this area. And this as it goes inland will be buried. There will be a cover on top of the rock, on top of the boulders. And there will be--what is excavated from the area of the inland alignment will be placed in front of the new revetment to bury a bit and to, as well, provide for beach nourishment.

In terms of impacts and mitigation measures, we looked at a number of key kind of resources in the area and I'd like to just briefly discuss, summarize what was found and then I would turn it over to Russ Boudreau to talk about the last three areas of impact and mitigation. In terms of archaeology, Xamanek Researches did an Archaeological Inventory Survey for the project. They did subsurface testing along the inland alignment and because it's beach and sand, you know, there is potential for burials. However, no resources or burials were found during the archaeological inventory survey, but archaeological monitoring is recommended during construction, and that will be carried out.

Endangered species, we had AECOS do a Flora, Fauna and Marine Inventory. There are...although no endangered species were, I guess, identified during the field work portions of the survey, through consultation and just through familiarity with the area we know that the area is frequented by green turtles which is an endangered species. And Kanaha Pond is also home to two endangered species, the Hawaiian Coot and Hawaiian Stilt. So mitigation measures will be carried out during construction to mitigate potential adverse impacts to the sea turtle and as well, to the endangered birds at Kanaha Pond. Most of those are observation especially during the mating season of the green turtle which is between April and August and as well, lighting for the Hawaiian Stilt and Hawaiian Coot are main concerns. So those during nighttime, I don't think there'll be nighttime construction and any lighting that will be used will be downcast.

The neighboring uses with the beach, with the recreational resources and uses on the west side and fronting the facility, the area is a very active windsurfing and kite surfing area. And the existing beach provides safe refuge for kite surfers who get into trouble. So that was a concern that was brought up during the public meeting. And the kite surfers wanted to have as much beach as possible for safe refuge. The uses to the east of the facility are the industrial uses and the project is not anticipated to have any adverse impacts on those uses or character. We looked at water quality and water quality is a concern during construction in terms of turbidity, silt running off the

site, so best management practices during construction will be used such as silt fences to isolate the construction zone from the water.

I'm going to turn the presentation now over to Russ Boudreau who will describe the, I guess, the coastal processes and how that--how the project interacts with the coastal processes, the type of impacts that are anticipated, how those may be mitigated or how those may be, can be addressed by the proposed project and we're looking at the down coast littoral drift. I think you had some description of that in the Hololani project in terms of the movement of sand up and down the coast, public access and recreational impact. So Russ?

Mr. Russ Boudreau: Good morning, Mr. Director and Members of the Maui Planning Commission and County Staff as well. So I'd like to do today is we've talked about a fairly significant project and so I'd like to give us just a brief overview of kind of the physical conditions that got the plant in the condition it is now and a little bit more background as far as how we develop the preferred alternative. So I little bit of context on the physical coastal processes that are occurring at the plant and then during that talk about how the project...we've basically developed the project that does our best to minimize any impacts to come up with the least environmentally damaging feasible alternative. Next slide please.

These are just some, some views of the context of the project. Just go back if you would Colleen, you're familiar with the area. The top two slides across the top are just basically on the east end looking west and then the second photo on the right there top, looking back towards the east towards Kite Beach and Kaa Point. And the bottom left, basically on the top of the revetment looking towards Kahului and then further to the west and the remaining beach at the west end of the revetment.

So the problem with the site is historically many, many years at the turn of the century as a wide, sandy beach. And so when there's a wide, sandy beach there's not a problem, but as the years have gone on, the amount of sand leaving the beach is greater than the amount that's come in and so the volume of the beach sand has reduced and that's caused by a variety of things including littoral transport which is the movement of sand by waves, wind is a contributor for sand that's blowing inland, when there's gaps in the dune system, things such as that. The importance of the productivity of the coral reef system and is it as productive as it used to be? Coastal storms and that includes tsunamis, also have an impact to the protection. And then as we look to the future what does climate change hold for us in terms of rising sea level.

So just a simple picture of just the basic coastal processes that are taking place on the site. So there's a variety of wave conditions there's the northeast trades that are persistent that push the sand kind of from east to west. We've got the winter storms that sometimes push the sand, they're the bigger storms back towards the east, but we've got these waves that then move sand along the shoreline. And so what we've got sand moves in both directions but the net movement of sand is from east to west and about 1,000 to 4,000 cubic yards per year moves along the plant, again, east to west. And so this is a telling slide. This is, these are basically shoreline erosion rates along the shoreline property. And it's interesting to note if you could see it's hard to tell me to describe it, these are historic shoreline positions that were obtained either from NOAA sheets when they would do these historic, you know, surveys of the water depth and things like that, and then later

than that we had historic aerial photos and these were...this was a map developed by the University of Hawaii and so it shows these historic shoreline positions. So this is Kaa Point, Kahului Harbor is just off the map there, look how far out the shoreline was, that's back in 1912, and then look at how much it's eroded over time. Keep in mind that the plant wasn't built until the 70's and so a lot of this was occurring before the plant was even there and the primary reason why this erosion has occurred has been a few things, but the key element of erosion was due to mining of the sand historically up drift for sugar production and things such as that. So a very significant volume of sand has been taken out of the system and that's what caused this erosion wave. The erosion is not as rapid as it is, as it has been in the past, it's leveled off a good deal but it's eroding with a long term rate on the order of two and a half feet per year average erosion over time that's current. So what we see here is in these bars represent basically the average beach loss in feet per year and the longest bars are around a little over four feet so we see over time, you know, four to five feet have eroded over time from the beginning of time series to the end and it's leveled off a bit towards, towards the west. And so we see that this is an area that has been eroding.

And so in addition to the threats of coastal erosion from storms and gradual beach loss, we also have the issue of wanting to protect the facility due to tsunami and we all learned from that about a year ago that the plant is susceptible to tsunami inundation. So this is just a picture, this is at the west end just at the edge, you can see where the tsunami inundation kind of came around the corner and moved some rocks a little bit and so it outflanked and in some areas it also went over the top of the revetment. Next slide. And again, further towards the west just some erosion of the upper beach due to the tsunami, the tsunami run up.

And then planning for the future. We're aware of looking forward what type of sea level should we be planning for in terms of accelerating sea level rise for a long-term project such as this. And so the University of Hawaii has been doing a lot of studies as well as the Federal government and things like that, and so we don't know for sure what's going to happen. The historic rising rate is the bottom line. This middle line is like an intermediate projected rate and then this is kind of an upper projection of what we think it could be up into the year 2100. So these ranges for the 50 years plan for anywhere from one to a little over two feet of sea level rise. If you look to the horizon to the year 2100 anywhere between one and a half to almost five feet of sea level rise.

And so putting all this together the planning parameters we kind of summarized as went forward for the project because we know the sand moves in the ...(inaudible)... from east to west. The sand volume movement is not a great amount, 1,000 to 4,000 cubic yards is not a huge amount which indicated the potential feasibility of a beach nourishment project. It wouldn't take, you know, huge amounts of sand to renourish the ...(inaudible)... but it's still an expensive undertaking. Average shoreline rate to plan for on the order of three feet year per year. In some cases over time it's been as great as six feet per year and just as a gauge let's plan for three feet of sea level rise by the year 2100.

And so as Mich pointed out there was two initial alternatives that were developed during the initial notice for the EIS and then a preferred alternative was developed as a result of initial comments as well as us just working closely with the County with the alternative. As far as just the revetment along the beach scarp it's a least cost alternative and basically what that would do is that would just complete the Corp of Engineers project that was started in 1979. Just finish it but just...but

maintain the property that the County has there for the plant and just armor the shoreline. It's the least cost but then it has an impact. It has an impact because it has footprint. It takes up sandy beach area and it has an impact on public access and recreation down drift. And we were aware of that at the time and so to mitigate for the loss of sand one of the most direct things to do is to put more sand back on the beach and beach nourishment is a common tool to offset the impacts of shoreline erosion. You're aware of the project in Waikiki that was just recently completed and as many other beach nourishment projects in other parts of the U.S., on the west coast, the east coast, but each site is definitely got its own characteristics. So we did an estimate of that and it's a lot more money. It's almost double the cost, the life cycle cost of the project because you're putting beach sand to cover up the revetment and it's an ongoing thing. It gradually moves away and then it's something that have to be redone. But it does offset the impacts even more than offsets the impact to recreational and lateral access.

So at that point, you know, looking at the cost of that and the County didn't want to be in the business of doing beach nourishment projects said what else can we do? And so we developed the inland revetment where this is the project that pulls the revetment back as far as we can right up against the infrastructure on the plant that can't be relocated and so it really it is the least environmentally, you know, impacting alternative. It does a good job I think of balancing costs and impacts. But there's still some impacts to be considered and so what does the buried alternative do in terms of impacts? Certainly in terms of littoral drift it minimizes the impact because two things, one is we as we build the revetment we're gonna excavate a certain amount of material that we can put back out on the beach and that's on the order of 13,000 cubic yards of material. Now that material will be tested to make sure that it is beach quality, but we looked at soil borings that were available in that area and it looked like good quality medium to course grain sand. So it would have to be tested ahead of time, but based upon what we know right now that material could be placed out in front of the revetment which could partially impact or fully, you know, basically mitigate for the impact of the lost footprint due to the revetment there. It does pull back as far as we can so it minimizes impacts to public access as Mich said in areas where the public would have to crawl over the revetment to get up to the top, you know for fishing opportunities or just to get from the east end of the beach to the west vice versa, we could put stairs in the revetment with handrails to do that and that would accommodate safe, public access going in either direction. And again, just like lateral access, pulling the revetment back as far as we can, and putting the sand that is excavated back on the beach it basically does our best to mitigate the impacts of on recreation. But over time, if their beach continues to erode then more and more that revetment will become exposed over time.

So as we've seen based upon the data that we've got that there is a critical need. We've seen the, you know, the projections of the time that the infrastructure can be exposed is within the planning horizon to do something now and we strongly feel that the partially buried revetment is the preferred alternative, the one that we came up with that was the least environmentally damaged...damaging, practical alternative. Thank you.

Mr. Hirano: Thank you very much, Russ. So we're now available to answer any questions the Commissioners may have.

Chair Hiranaga: At this time I'll open the floor to public testimony.

a) Public Hearing

Chair Hiranaga: Is there anyone here that wishes to provide testimony at this time, please come forward?

Ms. Irene Bowie: Good morning. Irene Bowie, Executive Director of Maui Tomorrow Foundation. I just have a couple of comments, questions, I'd like to put into the conversation. We certainly realize the immediacy of what this project calls for, but I think we're having a conversation in a vacuum and we need to be looking at the bigger picture of the continued location of this wastewater treatment plant. And while a figure like \$219 to \$269 million to relocate the facility is very daunting, I think that we still need to be considering the phrasing out of this plant. I would like to see something in the language that does discuss that.

Right now I know that the County is talking with a private company about possibly moving the plant to a location that's closer to the existing Central Maui Landfill and that company might be looking at methane produced by the landfill or a future waste to energy facility. They would pay for the plant and any new pump stations and wastewater pipelines and be reimbursed through sewer use fee increases so I think that's something we need to consider.

One question that comes up is what is the capacity of this plant with the approved development for Central Maui for the next 20 years at the very least let alone we're looking at this for 50 years. So how much more can this plant take without more injection wells needed at this location or other parts of the facility to be developed. I think that needs to be taken into the conversation. Because it also is in a primary flood and tsunami zone, again, do we just keep putting band aides on this thing or do we really face the tough question of needing to phase it out? And another important point on phasing out this plant and locating it to an inland area would make it more economically attractive to develop water reuse options which we desperately need to recycle the water and an inland plant would not be subjected to the constant salt water residue and erosion on the equipment there. So those are costs that we don't really consider. The overall cost of maintaining this plant versus moving it inland. So I just like to put that out there. I'd like to have further information on that and have that considered.

And I would also comment that the public meeting that's happening tomorrow night, it seems that it would have been helpful to have that meeting for the community prior to this item coming up on the agenda here. You might have a few more people, you know, with some ideas or comments or things. So if that's just, you know, we really, really are pushing for greater water reuse that would not only improve water quality for the turtles and marine species but it would also help with questions about that water in a recreational area for folks that are out there also. Thank you.

Chair Hiranaga: Questions, Commissioners, for the testifier? Seeing none, thank you. Anyone else wishes to provide public testimony at this time, please come forward? Seeing none, public testimony is now closed. The floor is open to Commissioners for questions? Commissioner Wakida?

Ms. Wakida: Let's see, this question I guess, well, I guess Mich. In reading through this, I saw some rather cavalier statements about this revetment having no impact which I question on

beaches in the vicinity. Where's the data to back that up?

Mr. Hirano: I'll ask Russ Boudreau to respond to that because it's really based on the coastal processes.

Mr. Boudreau: As far as impacts of the revetment on the shoreline, I mean, in the short-term we'll put the revetment there and we'll put...we'll bury it with the sand that was excavated from it, but over time, you know, there's mixed emotions about it or mixed feelings about it, but certainly in an area where the shoreline is eroding there is a term called, "passive erosion" and that is as the shoreline retreats, if there's an adjacent beach that is a sandy beach and then that part of the beach that's armored...the part of the beach that's armored is no longer going to be a sandy beach so that is an impact. That is an impact and that impacts recreation and public access and things like that. So in the long term, there are impacts due to the existence of the revetment at that location. What we've done is we've moved the revetment back as far as we can up to the infrastructure that can't be relocated. So for a good amount of time, that revetment is buried. And so as the erosive forces of waves move...there's sand that it's buried in front of it that is there to, you know, feed the waves and feed the down drift beach as well. So it's an alternative that mitigates, you know, and minimizes the impacts but over the long-term, you know, if the shoreline continued to erode there's that passive erosion impact, but then you have to ask yourself the question if the revetment was not there, and the shoreline was allowed to erode, what type of material is it liberating, you know, allowed to erode to feed the beach and the fact that it's, you know, existing infrastructure, you have to do something or relocate the plant. I think it's...we've pulled it back as far as we can. That's the best I can answer that question.

Mr. Hirano:(inaudible)...when you looked at the down current impacts of this revetment we say that there's no impact to the down current because those areas is really protected by the Kahului Harbor, the groins and --

Mr. Boudreau: The jetties.

Mr. Hirano: --the jetties that is out there. So it doesn't have down current impacts as it would if the say the eastern beach was a sandy beach, but's already protected so we don't see an impact along the coast.

Chair Hiranaga: Commissioner Wakida?

Ms. Wakida: I understand and that you talk about the sand moving.

Mr. Hirano: West to east.

Ms. Wakida: West to east, right. But does it also --

Mr. Hirano: I'm sorry, east to west.

Ms. Wakida: Yes, towards Kahului.

Mr. Hirano: Right.

Ms. Wakida: But does the sand then return like it does in other beaches? Is there, is there sand, is there a seasonal shift?

Mr. Boudreau: That's a really good question and yeah, there are a variety of components to that and what this 2...2.4 feet per year that's, that's an average over many years because yeah, you're right, the beach fluctuates seasonally. You know, some times of the year it's wider then storms come and it narrows. Sometimes it comes all the way back, sometimes it doesn't. So we've kinda filtered out the seasonal changes, the impacts of storms and things like that and so with the data set that goes back, you know, 1900, yeah, we've been able to kinda take out the signal of what's the long-term change and how that's varied over time. You know, we've got aerial photos. There's actually measured beach profiles that U.S. Geologic Survey has taken and various sources and we've all looked at all those data and so we've kinda filtered out seasonal shifts, long-term shifts, things such as that. So it's a really good question. But the long-term signal is erosion.

Chair Hiranaga: Just a follow up question. In the seasonality as the beach replenishes itself, is the sand coming from a eastern shoreline or is it being brought back to the shore from the lateral movement west and currents are bringing it back. Do you have any idea where this sand is coming from when the beach replenishes itself?

Mr. Boudreau: Well, when the beach replenishes itself, I mean, the seasonal fluctuations a lot of time are just onshore, offshore when big, steep storm waves move the sand it just pulls it offshore and then when the waves kinda calm down then they'll push it back onshore. But as far as other sources of sand that come you know, from the east it could be coral reef, that's the primary source of beach sand is coral reef. You know, there's some...most of the sand is of coral...you know, coral reef nature as opposed to like an inland source coming out of a stream and that's probably a possibly a contributor to some of the erosion over time is, you know, some research shows that the coral reef may not be as productive as used to be in terms of producing beach quality sand.

Chair Hiranaga: Thank you.

Mr. Boudreau: But that's the general, the general, you know, source of sand.

Chair Hiranaga: Okay, Commissioner Shibuya?

Mr. Shibuya: I'm looking at a regional shoreline issue here. And we're trying to mitigate the shoreline erosion with revetments and nourishments. Has there been consideration for T-groins and where would you place them and how many would you place?

Mr. Boudreau: We looked at early on back in 2005, we looked at a range of alternatives that did include T-groins and things such as that. There's a couple of reasons from a coastal engineering standpoint that we considered why they weren't necessary and the primary reason is that the long shore sediment transport rate isn't really, isn't really strong, you know, and it does vary a little bit from direction to direction. So for a groin to be really efficient it's better if the littoral transport is really heavy in one direction and doesn't reverse a lot. So that's one thing. And the fact that the

sand doesn't move, you know, that quickly was another reason not to incur the cost and we've seen some groins on Maui that just haven't, you know, at the north shore that haven't performed as well as well, as you know, we want to. I do agree that the T-groin can sometimes improve performance with the sand moving both directions, but also hasn't been a real proven technology, you know. And so with that and cost and things like that, the feeling was that was an alternative that could be ...(inaudible)... to look just at pure beach nourishment itself because if you did a two... T-groin, you'd probably wanna do beach nourishment as well. Typically when you put groins in, you wanna fill up the groin compartment to mitigate for any, if it pulled sand to offset that loss of beach sand down drift by filling it up with sand. So our thought was if it's only 1,000 to 4,000 cubic yards, just a pure beach nourishment project alone probably would be more cost effective.

Chair Hiranaga: Commissioner Shibuya?

Mr. Shibuya: Just a follow up in this. I'm looking at regional alternatives and solutions. The T-groin is very high in my priority. The second one is the growing the coral. Are we cultivating or is that alternative to start growing and cultivating the shoreline type vegetation as well as the coral? And the next one is in terms of the impact of the current storm channels, stream channels. There's two stream channels, both of them actually have to be cleared of vegetation that feed into and move the water in Kanaha Pond. So we have this whole regional effect here. Have we looked at that and how do we fix this?

Mr. Boudreau: Those are some pretty broad regional issues and I agree with all your points. As far as the coral production, you know, that's a major, I mean, you look at the size of the reef that's offshore, you know, that historically fed the beaches here and I know it has been degraded due to a variety of things, a lot of them probably caused by man in terms of water quality and things such as that, but I'm not an expert to say, you know, what the ...(inaudible)... of an coralline, you know, restoration could do in a natural environment like that with a horizon, you know, of this project. You know, but certainly the health of the reefs, and I think of just applying, you know, protections for the existing coral reef would probably would be a good step in the right direction. I know things are happening in that to really protect the reefs from further damage and things like that.

Chair Hiranaga: Commissioner Freitas?

Mr. Freitas: What is the life span of this existing plant? Is it near capacity?

Mr. Hirano: The capacity...I'll let Director Ginoza.

Mr. Kyle Ginoza: My name is Kyle Ginoza, Director of the Department of Environmental Management for the County of Maui. Right now, we still have ample capacity. Though for large projects, you know, outside of the current service area, we look at private developments to develop their own sewer capacity. So, there is capacity at the treatment plant.

Mr. Freitas: Ten years, twenty years?

Mr. Ginoza: Well, it depends on the velocity of development. I mean, at the current rate, I mean, we have ample capacity for a while. I think in our documentation we said 2029 we'll have capacity.

Right now I think the capacity is like 7.9 million gallons per day or 8, somewhere around there and we're running about 4 point something, like 4.1 or 4.5 million gallons per day.

Mr. Freitas: The cost of...to put this revetment wall in foreseeing change of orders and what have you, what is the estimated cost?

Mr. Ginoza: I'm sorry, what was the question?

Mr. Freitas: What is the estimated cost to do this wall?

Mr. Ginoza: To do the project, \$5 million.

Chair Hiranaga: Commissioner Lay?

Mr. Lay: This is for Tara.

Mr. Ginoza: Thank you.

Mr. Lay: Good morning, Tara. So with your expertise on this, what do you see as the best scenario in your opinion?

Ms. Tara Owens: Good morning, Commissioners. Thank you for your questions. I'm Tara Owens with the University of Hawaii, Sea Grant and County of Maui. The big conceptual answer to that question is if money weren't an issue, I think everybody would agree that relocation is the right solution. However, the County has made the decision not to relocate their facility. So I actually think that it's ideal that the proposed solution is able to accommodate, you know, pulling the actual structure landward so that there will be basically, we'll be buying more time on maintaining the beach resource. But there are...there are really two major considerations that I think you should be aware of for your eventual decision making. Okay, one issue is that there will be a expected loss of the beach. I think the timeline proposed here was maybe on the order of 50 to 100 years, but it could be sooner than that because probably erosion rates will accelerate in the future. So it could be on the order of a couple of decades that we see beach loss. There are other options for mitigation that we could consider such as renourishing beaches to the east that essentially feed this area, contributing to the State Beach Fund for future use, partnering with the Army Corp when they dredge the harbor in 2015. If there is usable sand in there, they'll need a fiscal partner and we could possibly beneficially use that sand. So that's one consideration.

The other consideration is that this does provide us some protection from tsunami over what exists today, but it isn't tsunami protection if there is a major tsunami event. There is still potential for marine inundation from tsunami. There's a 2012 paper, from this year, from a U.H. researcher that says the Aleutian Alaskan events that are possible, and there are possible magnitude 9 events or greater that could produce tsunami run ups 30 feet or more which is beyond what this wall could protect the facility from. So it's certainly something that is a risk factor that should be considered in the context of deciding to keep the facility here. It is about weighing risks against the cost.

Also, there are new tsunami inundation maps that have been produced by

Professor Kwok Fai Cheung at U.H. that have been delivered to the State Civil Defense that have not been yet shared with Maui Civil Defense. So it would be worth taking a look at what those maps predict and in the context of this proposal. That was maybe more than you expected or wanted to hear.

Chair Hiranaga: Just a comment Tara, so the experience that Japan had last year with that tsunami, I mean, as far as being proactive Japan is probably one of the foremost in the world as being proactive and all their mitigation measures or most of them were not adequate because of the size and location of the tsunami event. So I mean, even if we built the revetment that was 20 feet high, mother nature can still create something that would overcome it.

Ms. Owens: Possibly. And that's, you know, that's for the decision makers such as yourself to weigh out the risks versus, you know, the costs and the options.

Chair Hiranaga: Thank you. Commissioner Ball?

Mr. Ball: I don't know who this is for, but what is the contingency plan for the County when this location fails?

Mr. Ginoza: What do you mean by fail?

Mr. Ball: Well, in the event of a major storm, not necessarily a tsunami and the waves come up and compromise this facility, does the County have a plan for that day where we don't know when a tsunami is gonna come, so do we have a plan for when that, you know, when that event comes? What are we gonna do, that's over half the population is affected by this facility?

Mr. Ginoza: It's actually kind of two, two separate issues that we're discussing here where it's not that we can either reinforce the shoreline here or move the plant. Regardless of whether or not we move the plant or keep it there, we need to still protect the shoreline in this area because if you can understand, you know, there's like couple of different ways of treating sewage. You can either like have a regional sewer treatment plant which you typically locate as seaward as possible to utilize the gravity flow nature as much as possible of sewage or you can, you can have more, you know, separate plants which, you know, some other islands or like Kauai does. But the way that Maui had constructed it, we have three regional plants to serve the island. And so even if we move the treatment plant, we still have four major force mains, you know, one from the Kuau area, Kaa force main, one from the airport, Naska force main and one from Wailuku and one from Kahului that all converge at this site. And so we're looking at it as even if we were to move the treatment plant, we wouldn't reroute all of the feeding lines. So we'd still have a facility there that would need to be protected. But it's something that, you know, it's a matter of with the limited funding that we have as County taxpayers and County sewer users, how much are we willing to invest on an ongoing basis to stem any type of risk that might occur? You know, and that's where there is this potential investment of, you know, 250 or so million to move the plant, but that's an ongoing, you know, sewer rate increase of 50 percent increase that we're protecting on something...again something that may happen and that other things may go wrong as well in addition to, you know, like that pump station. We'd have to turn that treatment plant into a pump station which might be compromised as well. So even if we had the treatment upstream or you know, mauka, that might

be protected but all the lines, you know, that would or the line that would go to it might be compromised.

Mr. Ball: So that's my question. What is the plan then if something, when something happens?

Mr. Ginoza: So what we currently do whenever there's a tsunami issue is we de-energize our systems so that...you know, in case we got hit by something and the structures remained in tact, that because there's no energy to the system it wouldn't fry like the electronics and stuff, so you can kinda think of like if you threw hair dryer into your bathtub, if it wasn't powered up once you took it out and dried it, you could plug it and it probably still work. So that's kind of how we, we handle it on a--whenever there's a tsunami situation now with the realization that I believe it's on a order of little over 20-foot tsunami wave that we reinforced our plant for that, you know, if it is a, indeed a very large tsunami, that might compromise our plant. I mean, there are other issues involved with something like that happening because we have a number of key infrastructure pump stations that are also located along that shoreline that would be compromised. And so the sewage wouldn't even get to the plant because the upstream things that are loaded near the shoreline might be compromised as well. So we have...we protect it as much as we could as far as for a reasonable size wave to be able to endure that with the realization that under a, you know, truly catastrophic event there could be issues and there likely will be issues.

Mr. Ball: Don't be the guy at the lowest part of the --

Chair Hiranaga: Okay, I'm going to call for a five-minute recess since we have to have some housekeeping issues here.

Mr. Ginoza: Thank you

A recess was called at 11:25 a.m., and the meeting was reconvened at 11:34 a.m.

Chair Hiranaga: Any other questions, Commissioners? Commissioner Shibuya?

Mr. Shibuya: I'm trying to translate Commissioner Ball's concerns and I think I can translate it into vulnerability.

Chair Hiranaga: Okay, just one comment. Let's not start wondering off on tangents. We are here to provide comments on the Draft EIS for proposed shoreline protection extension at Wailuku-Kahului wastewater reclamation facility. So let's not look at relocating, possibility of relocating this facility 'cause that's not --

Mr. Ball: Though that does have decision --

Chair Hiranaga: You're out of order Commissioner Ball, I'm speaking. We are not here to look at relocating this facility at this time. So this is a large document and so let's keep our focus on this particular item. Thank you. Commissioner Shibuya?

Mr. Shibuya: It was in terms of vulnerability and the cost. And in terms of how vulnerable we can

make some mitigations and the Hololani seems to have a pretty good revetment design, and I like in a sense that they're putting these piles in to strengthen the revetment boulders and if that was a consideration why isn't it not considered?

Mr. Boudreau: The proposed rock revetment is basically very similar in design to the one that the Corp of Engineers put in in 1979. And it's given us, you know, whatever how many years it's been, 30 plus years of really good performance with little need to maintain it. I think there was some maintenance that was done but it's performed very well and it's met the requirement in terms of its design. As part of this project, we may need to do a little bit of repair as well as raise the height of it because of again, planning for the future tsunami inundation and sea level rise. But the revetments work well because they do a couple things is they're stable, but with a good construction like it's out there now, they did a good job of interlocking the stones, but also too, with revetments they absorb a lot of the wave energy. You know, they're not a solid structure which can accelerate wave overtopping and things like that. So they absorb and dissipate a lot of the wave energy. And so we strongly feel that the revetment is probably the best alternative in terms of stability and things like that and reduced maintenance and protection for the plant.

Mr. Shibuya: I just wanted to have...at least it be considered in the Final EIS that you did look at the Hololani type of design. It does provide another alternative. It does not get rid of the stones, it supplements the stones, it supports it, and that's all I'm saying.

Chair Hiranaga: Any other questions, Commissioners? Commissioner Hedani?

Mr. Hedani: This is probably a question for either Russell or Tara. The section...you know when I look at the aerial photograph of the plant and I look at the area where the existing revetment is, that's the only portion of the beach where the beach is gone, where the beach is missing.

Mr. Boudreau: Right.

Mr. Hedani: Is there a way to redo or use the stones from the existing revetment to pull that section back?

Mr. Boudreau: That probably need someone from the reclamation facility to talk about, but in other words, relocating these and move them landward as well?

Mr. Hedani: Right. Along with the rest of the revetment.

Mr. Boudreau: Well, I guess I really shouldn't answer that question. Maybe either Kyle or Juan because that there's infrastructure behind there.

Mr. Hedani: Since we were smart enough to spend \$250,000 in 1979 to put a revetment in that lasted 40 years, I figure I'd make it cost \$5 million by moving it again.

Mr. Ginoza: It was...oh, Kyle Ginoza, Department of Environmental Management. It was situated to protect that pond, so we wouldn't wanna move it in and possibly compromise the pond. It was built by the Army Corp and we would have to get their approval to move it. I don't it would be

desirable to move it back. We haven't looked at that situation because that was the original plan was to leave it along that alignment. So it is something that we'd like to --

Mr. Hedani: Could you move the pond?

Mr. Ginoza: Not really.

Mr. Hedani: There's a bigger pond across the street.

Chair Hiranaga: That's a wildlife sanctuary.

Mr. Ginoza: Well, trust me, we've explored with the State and with the Federal government to try to replenish the pond with some of our treated effluent which they did not agree to. But we did try that.

Mr. Hedani: Let me offer this just as a comment. I think Disney did it in Florida. They ran raw sewage through a race track, a channelized race track and the end product that came out the end was clean water. And the only thing that they had no moving parts, the only thing that they had in the race track was water hyacinths. That absorbed all of the nutrient material in the sewage. If you built something like that and then dumped the end product into Kanaha Pond, it would probably fix Kanaha Pond which looks like it's dying right now. That's just a comment.

Mr. Ginoza: Yeah, I think just based on the volumes we have, it would just require...I don't know enough about the treatment process to really answer that, but I think because of the volumes we have it would really create a big footprint as well as, we asked them is there any...you know, the State and Federal Governments if there's any opportunity for us to either...you know, if requires just a little bit more treatment to be able to replenish the Kanaha Pond Sanctuary just because then it would be a win-win for both sides to prevent or relieve them from having to pump as well as for us to find an alternative to disposal of our treated effluent.

Chair Hiranaga: And what was their answer?

Mr. Ginoza: They said that we couldn't dump any kind of treated effluent into a wildlife sanctuary. I mean, we're still exploring that because we did find...I know this is kind of tangential, but we did find an example in the Continental U.S. where that does happen. And so we're still exploring whether or not because the State is putting in money to pump water whether or not we could do that, but I know that's kind of tangential to this.

Chair Hiranaga: Just a follow up, could you go back to the aerial photo of the existing rock revetment? Pull back more. Yeah, no, yeah...the one without the little inserts. Okay, the right edge of the photo, that point is that point armored because it doesn't seem to be eroding.

Mr. Ginoza: Which right point?

Chair Hiranaga: The right edge of the picture.

Unidentified Speaker: Right here?

Chair Hiranaga: Yeah. You see that point. Is that armored? Are there groins sticking out of it? Why is that point not eroding?

Mr. Boudreau: That's rock. That's a remnant groin that was constructed at that point that's held that position.

Chair Hiranaga: So that was manmade.

Mr. Boudreau: ...(inaudible)...big rock, it's manmade.

Chair Hiranaga: Yeah, okay thank you.

Mr. Boudreau: There may have been a natural point that was augmented with rock. I'm not really sure, but there was a point that existed but it appears that rock was added to stabilize it.

Chair Hiranaga: Any other questions, Commissioners? Commissioner Lay?

Mr. Lay: This is for Kyle again. Just to give me a better perspective of the numbers that you gave out earlier, with Maui's population right now, you said you could treat it...what is it...8 million gallons a day, and right now you're at 4.5. So we're at what, 60 percent around?

Mr. Ginoza: The actual use right now is about, yeah, 60 percent or so. But that, you know, at the peak of development it was I think more like 5.5 as well as we do have some allocations for, that we, you know, for other in fill development that kind of use up some of the capacity as well. So yeah, to get a better picture, there's other layers that we'd have to add to it, you know, so it's not that we're at 60 percent capacity per se. It's a little bit more than that. But it's something that we don't wanna utilize all the capacity as we increase the regional base of the Wailuku-Kahului area. And so that's why I had mentioned with big developments that are on the outskirts, we're looking at those guys doing another small treatment plant as well as we're exploring whether or not there might be the need for another regional treatment plant on the southern portion of the isthmus.

Chair Hiranaga: Okay, any more questions about the proposed shoreline protection extension? Commissioner Hedani?

Mr. Hedani: I guess this question is for Tara. On the UH erosion map that we say that had those red bars on it, to me I think that particular map is kind of distorted because it shows going back to 1912. It shows the effect of sand mining from 1912. The bulk of the red was caused by sand mining which is not happening today. So instead of six feet, you know, I think the maps should be revised to something that more reflects the current trend under existing conditions.

Ms. Owens:and Nichol actually did a pretty thorough analysis and EIS of erosion rates looking at different time periods associated before and after tsunamis and associated, you know, before and after mining and I think the number that they ultimately came up with is about a little over two feet per year is probably the reasonable erosion rate.

Mr. Hedani: My only concern was if we were using these maps for decision making purposes then instead of showing six feet, it should show two feet as you say.

Ms. Owens: It's something to consider and can be a site specific consideration too because sometimes, sometimes these rates reflect...don't reflect extreme events either and therefore, may not reflect a high enough erosion rate for what a particular region my experience. So that's definitely a regional consideration, and you're right, the mining, the mining played a large role in the overall long-term rate that is presented in these maps.

Mr. Boudreau: Yeah, that's a very good question, but the 2.4 feet that we're looking at...you know, that is the current, you know, rate we're losing right now on an annual basis, 'cause yeah, historically it was, higher due to the mining and has leveled off. But the current long--term loss rate is on the order of two to two and a half feet.

Chair Hiranaga: Just a follow up question. Do you feel that the armoring on that point is actually causing a scouring effect which is causing the accelerated erosion just past that...west of that--

Mr. Boudreau: This point here?

Chair Hiranaga: No. The right edge of the photo.

Mr. Boudreau: I'm sorry...now that I understand you the --

Chair Hiranaga: The armoring on that point, do you believe it's causing a scouring effect which is accelerating the erosion west of that armorment?

Mr. Boudreau: You know, sometimes a lot through depends upon how much sand is coming around the point. The effect of that point would probably be localized. I don't think it would be felt all the way down here. So it may have some immediate effect, but pretty much this...the erosion over the long-term has just been a result of less sand coming in than is leaving, leaving the system, but you're right, when you have hardened point like that, it's almost like groin, it can have a down drift effect, but I don't think it would carry all the way the down this distance, but it could have an immediate effect, I agree.

Chair Hiranaga: Commissioner Shibuya?

Mr. Shibuya: I think it does have...that groin has a impact on the seaward movement of the sand. If you would at the photo very carefully, you'll see a whole bunch of sand out seaward of that point and that's why I'm favoring the growing of the coral as well as having the T-groins even if it's a small one it takes care of this lateral movement.

Chair Hiranaga: Any other questions, Commissioners? I have a question. You know, I like the concept of building this proposed seawall inland, but are there any concerns about encountering archaeological sites because the shoreline 100 years ago was much further out so people were probably habitating in that area and when people died or living, structures.

Mr. Hirano: There is, there is potential for that, Commissioner Hiranaga. You know, the sand dunes were areas for burials and so there's probability of that occurring. There was an archaeological inventory survey being carried out on the alignment which had subsurface testing. So they did, the archaeologist did test below the surface along the inland alignment and no resources were identified during that testing. The consultation with the State Historic Preservation Division was that archaeological monitoring during construction would be necessary. And when the... I guess the alternative along the scarp was identified, there was also archaeological reconnaissance taken along that area of the project and no burials were encountered as well because of erosion that's been continually carried out along that shoreline, you know, when you look at the historic shoreline profiles, the shoreline was out in this area. And if there were burials, I think they would have been maybe exposed by the erosion as well. So no evidence of burials have ever been identified or found over that period of time. But archaeological monitoring will be carried out.

Chair Hiranaga: Commissioner Lay?

Mr. Lay: I'd just like to comment on that one perspective on where they gonna be dredging the harbor in 2015 where we can use that sand to help to replenish this beach. I think it's a good option for this. I mean, you're gonna be bringing up sand. It's right there next to the harbor, it will help out...you know, make this beach at least more, you know, to help to build it up and not make it so hard, if we can use that sand.

Mr. Hirano: Consultation will be carried out with Army Corp just to see, you know, on the timeline of that. But there will be sand available through the excavation of the inland alignment as well about 13,000 cubic yards will be available too. But I think as a long-term option for a regional solution that certainly provides an opportunity.

Chair Hiranaga: Any other questions, Commissioners? Where are you proposing to obtain the boulders from?

Mr. Hirano: Most of them, I think they come from the quarries, you know, the rock quarries, Hawaiian Cement, Ameron have quarries.

Mr. Boudreau: Yeah, we would do the necessary research to find a local quarry and we would have very specific quality requirements in terms of strength durability, cleanliness. of the stone, things like that. But there's a history of good quality stone used for, you know, shoreline protection and navigation, you know, structures on Maui. So we would use those as a basis to start with certainly.

Chair Hiranaga: One option that I would like explored is possibly using the boulders located at the old lime kiln site next to Baldwin Beach whereby removing those boulders would also help Baldwin Beach with its current erosion problems. So that could be an option. I'm sure you're gonna have to get permits from DLNR and all that, but there is a large supply of boulders there that has been cleansed by the ocean for 100 years.

Mr. Boudreau: Okay, yeah, as long as they meet certain size requirements and things like that,

we could definitely incorporate them if it works out certainly.

Chair Hiranaga: Any other questions, Commissioners? Commissioner Hedani?

Mr. Hedani: This is just a comment. I thought that the solution of pulling the revetment inland and burying it using the excavated sand that they came up with for beach replenishment was a sound solution.

Chair Hiranaga: Just a comment on the fauna study where it was noted that no green turtles were sighted. Did you sight tiger sharks instead?

Mr. Hirano: No, they didn't see tiger sharks as well. They went out into the water. Not too far out.

Chair Hiranaga: Usually when there's no green sea turtles that means tiger sharks are around and vice versa. Commissioner Shibuya?

Mr. Shibuya: Generally if you plant seaweed, you're gonna find honu there.

Mr. Hirano: Well, they are known to be...you know, to frequent the area. They weren't identified during the survey, but you know, we do know that they are in and around that area.

Chair Hiranaga: Any other questions, Commissioners? So I guess at this time, we'll have Jim summarize our comments for us?

Mr. Buika: Thank you, Chair. Jim Buika, Planning Department. Looking back over my notes beginning with Penny. She was asking that some of the alternatives, the impacts were fully vetted but I think, we, she--her answers were or her questions were answered. Commissioner Shibuya talked about looking at a regional solution asking for consideration of options for T-groins and growing coral. So I can add that in as a first alternative. Jack had asked questions about the existing plant cost. We talked about Tara what the best solutions are. We brought up the issues of the dredging the harbor, so a second. And then at the end we talked...Commissioner Lay had suggested that as part of the project we consult with the Corp of Engineers and coordinate on potential dredging of the harbor using those sands for future nourishment of the area. So I can include that comments. Commissioner Ball had talked about what is the larger tsunami, basically tsunami contingency plan when the plant fails. We talked about that. I don't know if we need to consider that. Commissioner Ball, would you like something like that at least addressed?

Mr. Ball: I'm satisfied with the answer.

Mr. Buika: You're satisfied? Okay. Also, Commissioner Shibuya as another alternative had brought up Hololani, I don't know if the applicant understands. There's another proposed, it would be a combination revetment seawall combination. So I could discuss with them looking at an option of a revetment seawall option here. Would you like that explored?

Mr. Shibuya: Yes, please.

Mr. Buika: Okay. We talked about the erosion rate maps. Commissioner Hedani, whether it's necessary to reexamine the erosion rates. I don't think--do we need that explored? I think that's pretty fully explored in the EIS. Would you like...that's okay? And Chair Hiranaga talked about the archaeological impacts, I think those are adequately mitigated and were discussed. We don't need any additional. Do you want any additional input?

Chair Hiranaga: I think it's a concern because if you run into something, it's gonna stall the project.

Mr. Buika: Right, okay.

Chair Hiranaga: And I think the further inland you go, to me, my personal opinion, the greater the likelihood you're gonna encounter something. Because it's not necessarily only human remains, there could be...

Mr. Buika: Cultural artifacts.

Chair Hiranaga: Yeah.

Mr. Buika: Okay. Add a contingency plan or discuss contingency plan for--

Chair Hiranaga: Just further discussion. I don't really know if you need a contingency plan, 'cause depending on the find and what they determine is, you know, do you have to change the location of the proposed wall. But I think it's just a concern.

Mr. Buika: Okay. And then Chair you also talked about the boulders. Would you like some discussion on where the boulders would come from, that type of research?

Chair Hiranaga: Actually more specifically the feasibility of using the boulders located at the former lime kiln site east of Baldwin Beach because they are having a pretty significant erosion issue with scarping over there.

Mr. Buika: Okay. So I have that also as an option explored.

Chair Hiranaga: A source of boulders.

Mr. Buika: So that's it. If there's any other burning questions that I missed?

Chair Hiranaga: Commissioner Shibuya?

Mr. Shibuya: I did wanna have them take a look at the two storm canals. These canals if they maintain 'em, you know, they could probably add to the health of the Kanaha Pond because the water would be circulating within that. And I think that's how it operated historically before. So the channels would be there if you look at historical maps you'll see them there.

Mr. Buika: So to look at two storm canals that are in the Kanaha Pond and the circulation on Kanaha Pond?

Mr. Shibuya: Yes. It's a regional view that's why I'm taking.

Mr. Buika: Okay.

Chair Hiranaga: Commissioner Shibuya, are you certain those storm drainage channels empty into Kanaha Pond and not the Pacific Ocean?

Mr. Shibuya: I don't know. I believe they go to the ocean. See, prior to this in that ahupua`a the water was coming down from the mountainside and then they built the airport. And when they built the airport the water was stopped.

Chair Hiranaga: So you're saying the channelization prevented the water --

Mr. Shibuya: Yeah, circulating or moving and if you open up...because the sand dunes had developed and grown and we have vegetation in this channel, you now have no water coming into the Kanaha Pond from the ocean. And because of the tide changes you would have movement in the water and changing of the water.

Mr. Buika: So is that related to the wastewater treatment plant? Just ask that question. Is it proper for me to ask that question whether it's related or not to the wastewater treatment plant? I mean, we can explore it, but --

Chair Hiranaga: So maybe you could clarify your question, Commissioner Shibuya?

Mr. Shibuya: I'm just taking a regional look and the regional look would be we have T-groins and growing coral, trying to mitigate the effect. And any time you have channels surrounding this facility you would have a change in the shoreline structure and the water currents there and that's what I'm more concerned on. We're looking at it through a straw. I think we need to step back and look at it regionally and seeing how this impacts other surrounding areas not just the wastewater treatment facility but how does it impact surrounding areas, the beaches as well as the Kanaha Pond as well as maybe the harbor too?

Mr. Buika: Okay, I'll include that also. And that's it. Any other comments that I had missed?

Chair Hiranaga: Commissioner Hedani?

Mr. Hedani: Jim, I think, you know, when I think about the Kahului treatment plant, it seems like the plant is a dinosaur of sorts, yeah. It's a central plant that takes sewage that comes from Paia and processes it in Kahului and the end product gets injected into the ground which is not a good idea. If we're not gonna do recycling of the R1 effluent in a serious way so you can handle six or seven million gallons of product from the plant then I think the County should be looking at other alternatives like smaller plants in the areas that need to have them as opposed to a killer dinosaur plant like this that has to be honored for all time. And I think the department should also look at if there's a treatment process that can take the end product and make it more useful. Maybe not a tertiary plant, maybe a quad or quintile plant that can take it to the point where the bird sanctuary would love to take the water from it where you can drink it.

Mr. Buika: By department, may I ask a question just for clarification? Just, by department you mean the Department of Environmental Management not the Department of Planning? Correct? Okay. Thank you.

Mr. Hedani: And Public Works.

Mr. Buika: And Public Works.

Mr. Hedani: Environmental Management.

Mr. Buika: Yeah, Environmental Management.

Chair Hiranaga: Commissioner Hedani, are you proposing that this statement or question be included as an official comment from the Planning Commission?

Mr. Hedani: I think just for consideration by the department.

Mr. Buika: I'd like the experts to comment on that observation.

Mr. Ginoza: Could I just provide like a quick comment? Basically the problem right now with doing reuse in Central Maui is that we don't have customers in the area and we don't have the transmission line or pressurized system or the treatment to that level. And there's a provision in the County Code where we'd have to provide the water to a user at their avoided cost or at their normal cost. And so the big user in the area would be HC&S and their cost of water is pretty much...(inaudible)... you know, few cents per thousand gallons. And so for us to do that is quite an exorbitant endeavor that we've been exploring and going back and forth with the Council. So I think it's beyond the purview of us as well as this body to decide, you know, the relocation, but it's more at the policy level with the County Council which we have had discussions with them because it is a concern with you know, various members of the community. So we are looking at that and in fact, just like a month or two ago, we had a discussion with the Council Infrastructure Committee Chair to talk about possibly rehashing the discussion of a relocation or expanding or having more reuse for the Kahului treatment plant. But I think, you know, if we're gonna treat it to beyond tertiary there's still that kinda stigma with, you know, trying to drink it, you know, like toilet to tap. So I don't know about just reusing it. I mean, maybe for pond, but maybe not to drink again.

Chair Hiranaga: So are we done?

Mr. Hedani: I'm done.

Mr. Buika: Yes, I conclude my comments.

Chair Hiranaga: All right, thank you very much.

Mr. Buika: Thank you.

Chair Hiranaga: So questions, Commissioners, do we want to plow through the agenda?

Mr. Ball: Yes.

Chair Hiranaga: I think abstention is aye. Moving onto Item D, Acceptance of Action Minutes of September 11, 2012 and Regular Minutes of July 10, 2012.

**D. ACCEPTANCE OF THE ACTION MINUTES OF THE SEPTEMBER 11, 2012 MEETING
AND REGULAR MINUTES OF THE JULY 10, 2012 MEETING**

Mr. Hedani: Move to approve.

Mr. Ball: Second.

Chair Hiranaga: Moved by Commissioner Hedani, seconded by Commissioner Ball to accept the minutes. Any discussion? Seeing none, all in favor say, "aye."

Commission Members: Aye.

Chair Hiranaga: Opposed? Motion carries.

It was moved by Mr. Hedani, seconded by Mr. Ball, then

**VOTED: To Accept the Action Minutes of the September 11, 2012 meeting and
the Regular Minutes of the July 10, 2012 Meeting.
(Assenting - W. Hedani, K. Ball, D. Domingo, J. Freitas, I. Lay, M. Tsai,
W. Shibuya)
(Excused - P. Wakida)**

Chair Hiranaga: Item E, Director's Report.

E. DIRECTOR'S REPORT

1. Planning Commission Projects/Issues

a. Amending the SMA Boundaries

Mr. Spence: Commissioners, you have a memo from the Planning Program Administrator, Clayton Yoshida for public hearings next time, October 9th. We just have one public hearing item a change in zoning, R-3 to B-2 in Kihei for a veterinary clinic.

Mr. Ball: Is that time sensitive where we can't move that back to the next meeting so we can not have a meeting or...

Mr. Spence: Public or the the notification has probably been done and notification in the paper so I say, no it can't be moved back. We have also the SMA Minor Report. You can--any comments on the HCPO Conference. I trust that the Commissioners --

Chair Hiranaga: Hold on, hold on.

Mr. Spence: Oh, I'm getting ahead of myself.

2. **EAEIS Report**
3. **SMA Minor Permit Report**
4. **SMA Exemptions Report**

Chair Hiranaga: Yeah. So any comments Item E-2, 3 or 4? Okay, E-5?

5. **2012 Hawaii Congress of Planning Officials (HCPO) Conference - September 12-14, 2012, Ko Olina, Oahu.**

Chair Hiranaga: Any Commissioners wish to comment on the recent HCPO Conference? Commissioner Hedani?

Mr. Hedani: I thought the conference was well organized. Some of the sessions were a little long I thought because they ran like an hour, hour and a half in some cases, but I thought it was very informative. It was an interesting conference. I learned a lot. The Complete Streets thing, all of that it was very interesting.

Chair Hiranaga: Commissioner Lay?

Mr. Lay: Also found it very educational on that Ewa Beach area, and on the development and on how they projected their growth. And also the classes, very informative as far as the law classes and things that we have to consider and be wary of. I had a good time.

Chair Hiranaga: Commissioner Tsai?

Mr. Tsai: I really enjoyed the particular class on alternative energy. I thought it was very informative how they can produce ...(inaudible)... fuel and jet fuel simply from biomass.

Chair Hiranaga: Commissioner Ball?

Mr. Ball: I thought it very informative too as far as conferences go. The speakers were pretty well organized and the classes, if you will, that they offered were very helpful as a Commissioner. So I'm glad that we got to go. I would encourage the Department to send the same number or more to the next conference because I think the new people would get a lot of it too.

Chair Hiranaga: Commissioner Shibuya?

Mr. Shibuya: I just wanna say that yes, I...even though I'm an older Commissioner, I did gain lots of the insights into it and a lot of knowledge. And I hope that it can reflect some of the good things here. On Maui because we have limited land space, we have to be very judicious in how we use

the land. This Ewa Plains development was very troublesome for me because you have very fertile land that is going to be covered up with Urban and Quasi,Public-Quasi/Public type facilities and they're already doing it and you have an abundant amount of water, ground water that's available for food sustaining and energy sustaining and it was very interesting that how the 1950 type of development is now being--we're experiencing it now in that area. And I hope we don't do the same problems on Maui. Also, mass transit, I think that was the only way in which we can sustain ourselves, our economy by having and delivering people to their work sites on time and the least cost because you have the quality of life issue here of people stuck in traffic or people giving birth on the freeways. It's just really troublesome to me. That doesn't talk about quality of life. Thank you.

Chair Hiranaga: Comments from the Chair. Yeah, I've never been disappointed with the agenda and the presentations at HCPO Conferences. This is probably my at least my fifth, maybe my sixth because I was on the BVA before. So I'm very ...(inaudible)..., I attended very educational, very eye opening, typically on Oahu I don't go past Waikele. So going beyond that and see what's happening in Kapolei was very eye opening. Also, just a comment as we were driving in the morning, I think it was Wednesday morning about 8:30, as we hit H-1, it was backed up about three miles or four miles from the H-2/H-1 intersection and this is something they encounter on a daily basis. And coincidentally, the rail project was halted due to a challenge on the archaeological survey or staging of the archaeological survey. So I thought it was very eye opening, the challenges that the people on Oahu face, the cost of housing, the size of the lots, the size of homes. So I urge the Department to send all Commissioners next year to Kona for another great educational experience. I think Corporation Counsel was also there. Would the Corporation Counsel like to comment?

Mr. Giroux: I thought it was good. And it's good for me to see other planners and to mingle with the State officials and other counties who are dealing with the same legal problems that we are because we have similar structures. And it's just -- you know, one of the most frustrating things is as your attorney is that we have to work with the Charter and the County Code and that there's no other attorneys that we can look to say hey, how have you guys done with this because they've never dealt with it. But we have to look at their structure and see the similarities and work within them and it really, it does help to just be face to face with people who are doing parallel planning and dealing with parallel issues. So it's real useful.

Chair Hiranaga: Well, let's give the Director a chance to comment because I saw him there also.

Mr. Spence: Yes, I was there and I'll just have the Commissioners know we send more Commissioners and more Staff than any other County except maybe City and County. I thought it was a very good conference, very informative, the quality of the speakers, and the quality of discussion of the issues and the concepts and the ideas was really excellent.

Chair Hiranaga: Commissioner Hedani?

Mr. Hedani: Just one added comment, I'd suggest making sure that the Commission Secretary attends the conference also so that in planning future conferences --

Mr. Spence: Here we go.

Mr. Hedani: --when it comes to Maui, she'll know what and all goes into preparing one of these things.

Chair Hiranaga: Okay, any other discussion? Commissioner Hedani?

Mr. Hedani: I'm sorry, I missed Item 1a under E, Director's Report for SMA Boundaries. I'd like to ask the Director or the Commission to consider at least taking a look at the Olowalu area or Olowalu, Ukumehame area for addition to the SMA boundary area only because I see a lot of activity going on there right now. I know there's a very fragile reef environment offshore, probably one of the best reef environments on the island. And at least think about whether or not we should amend it to include those two peninsulas.

Mr. Spence: The -- Mr. Chairman?

Chair Hiranaga: Director.

Mr. Spence: Sometime between now and the time Kent leaves I'll learn.

Chair Hiranaga: You're only talking about five months now, be careful.

Mr. Spence: I know.

Chair Hiranaga: Six months.

Mr. Spence: Sometimes it takes me six months to learn something.

Chair Hiranaga: We made this request two years ago.

Mr. Spence: The idea when this Administration took, you know, sorry about, again, the SMA boundaries were established by, you know, makai side of the nearest State highway and so you have places like Haiku where it's a mile away and it's all agriculture and there's really nothing of development that's gonna, you know, being running off into the ocean. You have places like Olowalu that the SMA is right on the shoreline and that's not appropriate either. So we'd come up with a concept of that perhaps the SMA line you know, we have GIS now. We actually have all these data layers that we could apply to the different policies within State law and actually come up with something that makes sense rather than just wherever the highway went. So we still have that as a goal and the problem is is that it's, you know, we're doing the Maui Island Plan, we doing...starting up Lanai, starting up Molokai and so our GIS folks are really busy. But it still remains a goal that we actually look at the SMA boundaries and makes some sense of them.

Chair Hiranaga: Commissioner Shibuya?

Mr. Shibuya: Just to simplify our Planning Director's efforts here. You don't have to use GIS. All we have to do is the mauka to makai, we take care of everything. It's job security for us.

Chair Hiranaga: Commissioner Lay?

Mr. Lay: I just want an update on the Hyatt timeshare in Lahaina. I know there was issues about Condition 45 about the affordable housing, workforce housing and if we could just be updated on that?

Mr. Spence: And which one is this?

Mr. Lay: The Hyatt timeshare in Lahaina.

Mr. Spence: Hyatt. Okay.

Mr. Lay: Condition 45.

Chair Hiranaga: Commissioner Ball?

Mr. Ball: Quick question. Quick answer. What is does it take to move a SMA line and how difficult or easy is it or does it vary on the ...(inaudible)...where it is or...

Mr. Spence: And that's the way it was established when we first, you know, did the SMA boundaries. I think it was under Hannibal, it was the name I see on the SMA maps anyway. So they haven't really been given--I mean, I'm sure they've been given thought, but they haven't been significantly revised or looked at since then. It takes a--because the Commission is the SMA authority under County Charter, it would take some proposal. I mean, the Commission would say, hey we wanna do this, and you know, we would present something to the Commission and they would say yea or nay. I mean, it takes --

Mr. Ball: Public hearing and all that.

Mr. Spence: --it takes public hearing, everything. It takes your action to establish SMA boundaries.

Chair Hiranaga: Perhaps when the community plan they're starting to be reviewed that would be an opportune time, although that's probably ...(inaudible)...

Mr. Spence: At least. I know it seems we're perpetually planning and we should be implementing a lot more than ...

6. Discussion of Future Maui Planning Commission Agendas

a. October 9, 2012 meeting agenda items

Chair Hiranaga: All right, so we already covered, I believe E-6 which is the next proposed agenda. So if there's no objection, we'll adjourn the meeting. Thank you.

F. NEXT REGULAR MEETING DATE: OCTOBER 9, 2012

G. ADJOURNMENT

The meeting was adjourned at 12:25 p.m.

Submitted by,

CAROLYN J. TAKAYAMA-CORDEN
Secretary to Boards and Commissions II

RECORD OF ATTENDANCE

Present

Keone Ball
Donna Domingo Jack Freitas
Wayne Hedani
Kent Hiranaga, Chairperson
Ivan Lay, Vice-Chair
Warren Shibuya
Max Tsai
Penny Wakida

Others

Will Spence, Director, Planning Department
James Giroux, Deputy Corporation Counsel, Department of the Corporation Counsel
Rowena Dagdag-Andaya, Deputy Director, Department of Public Works