

**MAUI PLANNING COMMISSION
REGULAR MINUTES
JULY 27, 2010**

accepted: 9/28/10

A. CALL TO ORDER

The regular meeting of the Maui Planning Commission was called to order by Chairperson Jonathan Starr at approximately 9:01 a.m., Tuesday, July 27, 2010, Planning Conference Room, First Floor, Kalana Pakui Building, 250 South High Street, Wailuku, Maui.

Mr. Starr: Okay, good morning one and all. Welcome. This is the July 27, 2010 meeting of the Maui Planning Commission. I'd like to welcome everyone that joined us today. I'd like to introduce the commission and other folks who make these meetings work. Commissioner Kent Hiranaga is the first commissioner. Orlando Tagorda. We have Commissioner Ward Mardfin. We have James Giroux, Deputy Corp. Counsel who's our lawyer for the commission. I'm Jonathan Starr. I'm Chair. We have Deputy Director Ann Cua who works with us to make sure Current Division runs smoothly. We have Commissioner Donna Domingo. We have Commissioner Warren Shibuya. Commissioner Lori Sablas and we have Commissioner Penny Wakida. We have Mike Miyamoto who is Deputy Director of Public Works. The Directors of Public Works and Director of Water Supply are both ex-officio members of the commission. We're glad that Public Works is represented at these meetings. We have a number of other members of staff as well with us today. We have Carolyn Takayama-Corden who's the secretary and administrator for the commission. We have Planner Jim Buika who is our shoreline planner, I'm not sure who else might be with us. I did see also I'd like to welcome two old friends of mine, former Mayor Alan Arakawa and former Councilmember Alice Lee. I don't know if they're here working or just enjoying the atmosphere.

Anyway, we'll proceed right along. The first order of business is we allow members of the public to testify on any item that is before the commission. They have two separate opportunities. We ask them to take only one of them. Either they can testify before the meeting which is now or they can testify before decision making on any item. So if any members of the public wish to testify would invite them to do so. Please make yourself known. Anyone wishing to give testimony please let us know. Not seeing any, the initial public testimony portion of the meeting is closed. We'll move along to our agenda. Our first item is.

Ms. Cua: Your first item on the agenda is the election of a Vice-Chairperson.

B. ELECTION OF VICE-CHAIRPERSON FOR THE 2010-2011 COMMISSION YEAR

Mr. Starr: Just to fill people in we had a deadlock vote on the first meeting in April where I was elected Chair. We had a deadlock vote for Vice-Chair and so we put it off for a while and we're ready to take up that item again since it's been agendaed. So I'd like to call for nominations for Vice-Chair. Commissioner Sablas.

Ms. Sablas: I'd like to nominate Ward Mardfin.

Mr. Starr: Okay, is there a second to the nomination of Commissioner Mardfin. Corp. Counsel informs me we don't need a second. So Commissioner Mardfin's name is on the floor. Are there any other nominations? Commissioner Domingo.

Ms. Domingo: Thank you. I want to nominate Kent Hiranaga.

Mr. Starr: Okay, we have a nomination for Kent Hiranaga. So two members have been nominated. Are there any additional nominations? Not seeing any, nominations are closed. Would either of you like to make a brief comment? Commissioner Hiranaga.

Mr. Hiranaga: Not at this time.

Mr. Starr: Okay, Commissioner Mardfin, anything?

Mr. Mardfin: This is going to sound silly. I apologize for being in a T-shirt. I usually carry an aloha shirt in the back of my car for this. If elected, I will not neglect that in the future.

Mr. Starr: Understand. We do understand also that you started many, many hours ago in Hana and at that point it might not have been bright enough to see through your closet. Anyway, anyone wishing to make any comments or should we proceed with the vote? We will proceed with the vote. Alphabetically, all those in favor of Commissioner Hiranaga as Vice Chair for the rest of this term please raise your hand. The count.

Ms. Cua: We have three ayes. (O. Tagorda, D. Domingo, K. Hiranaga)

Mr. Starr: All in favor of Commissioner Mardfin, please raise your hand.

Ms. Cua: We have four in favor, five actually sorry. (S. Sablas, W. Shibuya, P. Wakida, W. Mardfin, J. Starr)

Mr. Starr: Okay, so I'd like to congratulate Commissioner Mardfin.

Mr. Mardfin: Thank you very much.

Mr. Starr: Why don't you introduce our next item and we'll proceed with business.

Ms. Cua: We now proceed to new business under our agenda and our first item is a request by Mr. Robert McDaniel III, Development Partner of Kanaha Professional Plaza LLC., requesting comments on the Draft Environmental Assessment prepared in support of the Special Management Area Use Permit for the proposed Maui Medical Plaza project consisting of the construction of a six-story, approximately 132,865 square foot professional medical office/laboratory facility, a six-story approximately 365 stall parking structure and related improvements in the M-2 Heavy Industrial District at 151 Hana Highway in Kahului at TMK 3-7-011: 028. The planner on this matter is Jim Buika.

C. NEW BUSINESS

- 1. MR. ROBERT T. MCDANIEL III, Development Partner of KANAHA PROFESSIONAL PLAZA, LLC requesting comments on the Draft Environmental Assessment prepared in support of the Special Management Area Use Permit for the proposed Maui Medical Plaza Project consisting of the**

construction of a six-story approximately 132,865 square foot professional medical office/laboratory facility, a six-story approximately 365 stall parking structure, and related improvements in the M-2 Heavy Industrial District at 151 Hana Highway, TMK: 3-7-011: 028, Kahului, Island of Maui. (EA 2010/0002) (SM1 2010/0006) (J. Buika) (The Draft EA was circulated with the mailout for the July 13, 2010 meeting.)

The EA trigger is the utility work being done within the State right-of-way.

The project needs a Special Management Area Use Permit. Action on the Special Management Area Use Permit application will be taken by the Maui Planning Commission after the Chapter 343 process has been completed.

Mr. Starr: Mr. Buika before we proceed Chair would like to disclose that I feel I have what may be perceived as a conflict with this item. My wife is President of the Maui Coastal Land Trust and although she does not gain fiduciary benefits from it there is a possibility and there has been an offer that that organization, the Land Trust might benefit from the remediation of the project. So with that, I'm going to recuse myself from this matter and I'm going to hand the gavel to the new Vice-Chair. Mr. Mardfin, it's yours. I'll take over after this item. Ms. Cua.

Ms. Cua: Sorry, I neglected to mention that the trigger for this environmental assessment is the utility work being done within the state right of way and the project does need a Special Management Area Use Permit and action on the Special Management Area Use Permit will be taken by the commission after the Chapter 343 process is completed and based on your training you know that this is the first step in the process, the draft environmental assessment. The goal for today's meeting is to get comments from this on what you hear today and on the document that you received on July 13, 2010. So we want to get your comments today and at this same time the document is being circulated to agencies and the public and so this is the comment period and so when the applicant receives all of the comments they're going to have to address that and they will come before you again at the final environmental assessment process and then one more time finally after the challenge period on the environmental assessment they'll come before you for the special management area permit. So you'll get three chances to review this application for this project. Thank you.

Mr. Mardfin: And I believe it is appropriate to turn to the planner to make the initial presentation.

Mr. Jim Buika: Yes, thank you Vice-Chair and congratulations. Vice-Chair, Commissioner Starr and Commissioners my name is Jim Buika, I'm a planner with the Planning Department and with the Vice-Chair's permission prior to receiving comments from you I would first like to introduce just in three slides just the purpose, today's matter and then again to reiterate some of the procedural matters Ann alluded to. Then I would like to turn it over to Ms. Alice Lee and Mr. Mark Roy representing the project to provide a project overview and to review mitigation options to protect the environment that have been incorporated into the project. So with the Vice-Chair's permission I'll proceed.

Mr. Mardfin: Please proceed.

Mr. Buika: Thank you. Prior to proceeding and now that the lights have gone out I'd like to also introduce one additional staff member from the Planning Department, she's a summer intern from the UNLV and she's interested in a career in Planning, her name is Tatianna So anyway I wanted to recognize her for her assistance this summer and I invited her to join in the proceedings to see how the commission will proceed today.

So again, today's – the purpose for today's session is to review the draft Environmental Assessment only. The Maui Planning Commission will provide comments to the applicant, ask for clarifications and request additional information for completeness of this draft. Myself as well as the applicant will compile the Maui Planning Commission comments in a formal letter back to the applicant for follow up research and response. These responses to the Maui Planning Commission comments will be incorporated into the final Environmental Assessment by the applicant and presented again to you at a future date.

As far as the Environmental Assessment procedural matters, this draft Environmental Assessment has been prepared pursuant to Chapter 343 Hawaii Revised Statutes, entitled, Environmental Impact Statements. The trigger again is the proposed action involves a proposed driveway and utility improvements affecting Hana Highway, a state facility and East Kamehameha Avenue, Kahului which is a county facility. The accepting authority is this body, the Maui Planning Commission. The document has been reviewed by the Planning Department and it meets the requirements for a draft EA that's why it's before you and also the draft Environmental Assessment availability announcement has been published in the Department of Health's Office of Environmental Quality Control Environmental Notice and it is on line beginning July 23rd and there is an open 30-day public comment deadline of August 22, 2010. We have done a simultaneous transmittal of the draft Environmental Assessment with the Special Management Area Use Permit application to 43 agencies and organizations for review and comment. So that's going simultaneously with this meeting. And in the future following today's session the Maui Planning Commission will have a second meeting to review and accept the final Environmental Assessment as a Finding of No Significant Impact or if there are significant impacts it will go to an Environmental Impact Statement and then following the FONSI, as it's called, a third meeting will follow the completed Environmental Assessment process in which the Maui Planning Commission will conduct a public hearing to review the Special Management Area Use Permit application. So we have a ways to go and this is the first of a three-step process. So at this point I'll turn it over to Ms. Alice Lee and Mr. Mark Roy to present a short power point and description of the project before we begin to answer your questions and comments. Thank you.

Mr. Mardfin: Jim, before you go, you mentioned it meets – the department reviewed it for meeting the requirements.

Mr. Buika: Yes.

Mr. Mardfin: Is that a formal thing in terms of it covers this, this and this?

Mr. Buika: It's a prescriptive list. It doesn't mean that the document is complete, but that all of the pieces are in place as an initial draft.

Mr. Mardfin: Thank you very much.

Mr. Buika: I'll introduce Ms. Alice Lee.

Ms. Alice Lee: Thank you Jim. Good morning Chair Starr and Vice-Chair Mardfin and Members of the Commission. My name is Alice Lee and I was asked by the owner to assist with coordinating the consultants and resource advisors for this project. We believe that we have assembled a great team of highly skilled professionals to create a quality project which will fill a vital and important need in our community. The project team includes the owner's representative Mr. Robert McDaniel III, architect Harrison G. Fagg, landscape architect Brian Maxwell, civil engineer Stacy Otomo, traffic engineer AECOM whose representatives are here today Lloyd Lee and Warren Yamamoto, wetland consultant Penny Levin, planning consultant of course is Mark Roy, CZM and Permit Facilitator is Michelle Cockett, cultural advisors Leslie Kuloloio and Jill Engledow, archaeological consultant Erik Fredericksen and resource advisor Alan Arakawa.

At this time, I would like to call upon Dr. James Hansen. It was his desire to provide the patients at the old Maui Clinic and the people of Maui a state of the art healthcare facility that actually set our efforts in motion. Dr. Hansen.

Dr. James Hansen: Chairman Starr, new Vice-Chairman, ladies and gentlemen of the Planning Commission thank you for allowing me to approach me with what I think is a very exciting project. I'm a gastroenterologist and those of you who have not had their colonoscopies please see me at the end of the day.

Several years ago physicians like myself who practiced at Maui Clinic got the word that A&B, Alexander and Baldwin was going to tear down the building that we were in. That generated some interest not only for ourselves but for our patients. Maui Clinic had taken the handoff from Puunene years ago in delivering healthcare to the plantation workers and then that's been carried on at Maui Clinic for 50 something years. Our building is old and tired. We lack adequate facilities and so not only were we urged to move by A&B but we had a reason to think about moving.

Initially we were interested in building a smaller building and just accompanying the doctors who were going to be moving. We wanted the patients who have been going to Maui Clinic to not have to find a place to go some place a long ways away. We wanted them to be in the neighborhood. As we developed the project we had a number of doctors who were interested in being part of this and ...(inaudible)... practitioners and we were very happy about that because it really kind of fulfilled one of my dreams and that was to provide Maui County with the very best outpatient healthcare that we could. I want to make clear from the get go this is not a hospital. This is not going to be a facility with red lights and ambulances and critically ill people coming here. This is an outpatient healthcare facility with ancillary services that include x-ray, lab, pharmacy and physical therapy and therein lays the value in a large integrated healthcare system. This won't be integrated politically but it will be in the sense that we are all under one roof so that the patient's odyssey is a seamless one and not disjointed the way it is today. This building will provide the means for communication through electronic medical records which our president has advised us to do. It makes that an easier task force as we practice medicine. It also makes it easier as I said for our patients to move

from one place to another so that not only will we have space and a community of healers in a sanctuary of healing but we will have new facilities that provide advanced imagining and all the things that go along with practicing medicine. We think our patients will be well served.

The physicians, you all know we have a crisis on Maui. I hope you do. If private healthcare is not focused on then most of the healthcare in this county will fall to Kaiser and to Maui Medical Group and I don't think they have the facilities to deal with it. We're losing doctors, we've lost many doctors since I've been here. I've been here 10 years and many good doctors have gone. Physicians are difficult to recruit to Maui. It's a difficult place and I cannot fix the things that make it difficult but we can provide a turnkey facility that will be attractive and a physicians like a turnkey facility. I practiced the first year at Maui Medical Group. That was hotel and they did a lot to make it a healthcare facility. It is still a hotel. Physicians need the kind of thing that makes patients comfortable. There's a integrated function between front office and back office where patients feel that their physician cares about them and physicians will do a better job when they have that kind of facility.

There are other things that I think are worth mentioning to you. This is a good business proposition. I suspect there will be over a 100, 150 new doctors each of whom may employ four to five people. This will be a sustainable long term employment opportunity for Maui. I think that part of that mission that we – I've looked at is to make Maui County a healthcare industry for the Pacific Rim. Now that sounds grandiose but why if you don't shoot to the moon never you get half way. I think if Maui County can do it that we should do it. I think telecommunications will allow us to reach Lanai and Molokai. I go to Molokai several Mondays a month and I do that because there are very few physicians and there's a need for outreach and see what's going on out there and also Lanai and there's a lot of good doctors in those places but they need help. I believe a center like ours with the proper telecommunications will reach those physicians and give them help.

I also see this building as a venue to partner with the University of Hawaii and Maui Medical – MCC and to bring trainees to our facility to learn about ambulatory healthcare. It's a very different animal, the inpatient healthcare. Inpatient healthcare is a very rapid event that's difficult to learn, it takes many years working in a tertiary hospital. But ambulatory healthcare gives more time for teaching and learning how to become a healthcare provide. So I see these as a positive things that come from the central benefit and that is providing quality healthcare for our citizens here in Maui County. So thank you for your time.

Mr. Mardfin: Thank you.

Mr. Mark Roy: Thank you Dr. Hansen. As Alice Lee introduced, I'm Mark Roy, my name is Mark Roy with Munekiyo and Hiraga. I'm here today as the planner on the project, planning consultant and we're here today cumulatively representing Kanaha Professional Plaza. We have a brief power point presentation that we'd like to offer to the commission today.

Mr. Mardfin: Mark approximately how brief?

Mr. Roy: I think it's probably around 15 minutes, 10-15 minutes.

Mr. Mardfin: Proceed.

Mr. Roy: And ultimately what we're trying to convey here is a good summary of the environmental analysis is being provided on the project.

I'd like to start off by giving a brief overview of the project site for the Maui Medical Plaza project. It's a 2.5 acre piece of land in Kahului and is identified as Lot No. 8 of the Kanaha Industrial Subdivision. It's located in an urban infill location in the commercial and industrial core of Kahului along Hana Highway. We have another slide that gives you an idea as to where the site is. It's pretty much directly across the street from 24 Hour Fitness and like I said it's located in the commercial industrial core of Kahului.

Uses in the immediate vicinity include various light and heavy industrial land uses. It's reflected on the next slide which is an aerial photo around the harbor and including Pacific Biodiesel, Chevron and various commercial and retail uses both to the north, west and south of the project site including Maui Mall, Island Auto Center and Jim Falk Motors of Maui. It's important to note also as you can see by the green area on the right of the slide that the Kanaha Pond Wildlife Sanctuary is located to the east of the project site and is separated from Lot No. 8 which is the project site by the Kahului drainage canal. So I'll just point out the project site, it's approximately here and the drainage canals separate it from the Kanaha Pond Wildlife Sanctuary. The drainage canals that I just mentioned I believe were constructed in the 1970's by the U.S. Army Corp of Engineers to provide drainage function to the Kahului industrial areas and they're currently owned and maintained by A & B.

In regards to existing conditions on Lot 8, the project site. The site is currently vacant and overgrown. We have a couple of shots here. First looking across Hana Highway at the project site and you can see the industrial uses behind towards Kahului Harbor. And then here we have a shot taken from Kanaha Pond area looking in the foreground here across the drainage canal and then this is the project site looking towards the retail areas of Kahului and industrial areas with the harbor.

In regards to land use designations the project site currently has all land use designations that are necessary to allow development of the proposed Maui Medical Plaza. As you can see on this slide it's designated urban by the State Land Use Commission, HI Heavy Industrial by the community plan and M-2 Heavy Industrial by county zoning which does also permit various business uses within that zoning category and the height limit within this zoning category is six stories. It's also important to note I think that the ongoing 2030 General Plan Update and draft Maui Island Plan process places this particular site within the Urban Growth Boundary for Kahului.

Here we have a community plan map from the Wailuku-Kahului Community Plan which just gives the commission a good I think perspective on the intended land uses for the Kahului Harbor area. You see heavy industrial here, transitioning over to light industrial and business uses and obviously we have the Kanaha Pond Wildlife Sanctuary here. Project site as I noted before is located within a heavy industrial subdivision.

As I mentioned before the proposed project we believe represents a unique urban infill opportunity

for Kahului and it's consistent with the guiding principles of the Countywide Policy Plan and a directed growth strategy is contained within the draft Maui Island Plan.

A brief summary is this facility is envisioned as a six-story medical office facility approximately 70 feet in height with 93 feet to the top of the elevator shaft that would stick up above the six stories. It provides approximately 110,000 square feet of gross leaseable floor area for medical facilities and there'll be an attached 365 stall parking garage which is actually attached and at the back of the Maui Medical Plaza as you'll see in the forthcoming slide.

Related improvements are necessary for implementation. The project ...(inaudible)... landscaping, installation of onsite, offsite utilities including two access driveways. We'd also like to note that there's a comprehensive landscaping plan that's being put in place for this project in respect to the surrounding areas and the need to provide a transition from the heavy industrial land uses that surround the harbor out towards the Kanaha Pond. And as part of that vision there'll be an onsite educational viewing platform for use by the general public, people working at the facility and also patients of course and the plan there is to utilize it as an educational resource so people can learn about the goals and objectives of the Kanaha Pond.

Here we have a site plan. I'll just run through the basics. The Maui Medical Plaza here is oriented and adjacent to Hana Highway which is along the bottom and here we have the attached parking structure which is providing approximately 365 parking stalls. There's also here above the site the drainage canals that I mentioned earlier in my comments and Kanaha Pond is off to the right-hand side.

As mentioned by staff, Chapter 343 draft EA has been completed for the project, before I get going on a summary of the environmental assessment's findings I'd like to give the commission a perspective as to what development of the site is ultimately going to look like. Here we have a three dimensional rendering looking across Hana Highway from the other side of Hana Highway towards Kanaha Pond and as you can see it utilizes a staggered six-story design that was actually formulated through a process of alternative analysis with input from preconsultation and but I should say from the Urban Design Review Board.

Now the next is a shot looking from Kanaha Pond and I as I mentioned before the parking facility would be attached to the Maui Medical Plaza and would be viewable from the Kanaha Pond location.

Here we have a sideward shot just to give the commission a good understanding as to what the facility would look like upon development with the parking structure attached away from the Hana Highway and the Maui Medical Plaza stepping back from the first story to the sixth story away from Hana Highway.

The Chapter 343 the commission has received a couple of weeks ago is a technical assessment of the proposed development. I'd like to now briefly give an overview as to some of the key studies and mitigation measures that are resulting from the environmental assessment process that lead to the support for an anticipated finding of no significant impact determination.

In regards to wetlands there is a .94 acre wetland on site which being studied and determined to be a functionally degraded due to its separation from the larger wetland resource within the pond. The next slide shows the delineation of this wetland on the project right in the middle, the developers for the project has been working for the last four or five years I believe with the Department of Army on federal permitting procedures necessary to formulate to compensate wetland mitigation plan to offset for the loss of degraded wetlands that are currently on the site. This is being and this is involved a comprehensive alternative analysis that initially took wetland proposals at Kanaha Pond for reasons, a number of reasons including potential enhancement of vegetation within the pond and impacts to aircraft flying towards the airport. The Army concurred that an alternative location could be sought and so a wetland mitigation plan has been accepted fairly recently in January of this year, it involves rehabilitation of five acres of wetland that the Waihee coastal dune and wetland refuge over in Waihee. The next slide shows you the location of this preserve, the 270-acre preserve and the wetland mitigation plan will involve compensating or enhancing five acres of wetlands to replace the approximately one acre that would be lost to project development. This plan has been accepted by the Department of Army. SMA permit has been issued for the work by the Planning Department and the mitigation work will be completed by the construction of the project. It's being done in conjunction with the Maui Coastal Land Trust of course.

The next area of the EA is flora and fauna which we obviously felt was very important given the proximity to Kanaha Pond. A Biological Resources Survey was done. It involved numerous site visits and identification of I think 32 species in total of which were identified to be indigenous. There were no mammals on the site, no evidence of the Hawaiian Hori Bat. There were four species of non native birds observed. Only one species of endemic water bird, the Hawaiian Stilt was observed flying across the site. The study concluded that there are known rare, threatened or endangered species of flora or fauna within the project site and as such, you know, with project development there's no impact to regional botanical resources anticipated.

There were a number of recommendations that came out of the flora and fauna study, I think the most important of which was the placement of the human elements for the building, the actual Maui Medical Plaza on the Hana Highway side of the project site and also the use of vegetation along the project boundary between the pond and the project site. Of course through best management practices, the careful management of pollutants during construction.

Now next I'd just like to touch upon the archaeological cultural resources. An archaeological assessment survey was completed for the project site. It has been approved by the State Historic Preservation Division and did not find any evidence of archaeological cultural resources within the project site. Again, it was emphasized or noted that it's a heavily disturbed site from previous ground moving activities related to the construction of the subdivision and the drainage canals that go near the site.

In regards to cultural impacts a separate study was done to receive information from informant interviews and obtain ...(inaudible)... and archival research which cumulatively was utilized to draw conclusions which confirm that there is no recent use of the project site for traditional cultural purposes in recent years at least and as such the conclusion was that the implementation of the project will not directly adversely affect any cultural practices or beliefs in the immediate vicinity.

The next is drainage another important issue given the proximity to the drainage canals of course and the Kanaha Pond. A preliminary drainage report was done for the project. During construction a full program of best management practices will be utilized to prevent the loss of soil to surrounding waterways during construction and also to prevent sedimentation as well and also air and dust pollution related to construction activities.

From a long term standpoint there will be a proposed drainage system put in place to serve the project which will utilize a combination of detention basins and filter insert to remove pollutants suspended in the runoff. Under county rules what's required is about 2,800 cubic feet of drainage retention. The proposed project is actually looking at providing over 6,000 cubic feet of retention capacity is the equivalent to about 200% of the storage capacity required by Maui County drainage rules and as such the drainage system will accommodate 100% of the total post development flow for the 50-year, one-hour and two-year, 24-hour storm event, ...(inaudible)... events for the drainage system. With this system in place we believe there are no impacts to be anticipated on downstream properties from the project site including the drainage canals that I mentioned earlier and the larger Kanaha Pond wetland resource.

Traffic of course is an issue requiring much attention in downtown Kahului. A traffic impact analysis report has been prepared. This report evaluated using traffic counts, existing and future conditions both with and without the project in place. The roadway improvements that have resulted or come out of this extensive study include a number of improvements which I'll just briefly summarize and these are intended to enhance the operational efficiency of the surrounding roadway system along Hana Highway and beyond.

The first is the addition of a third lane to Hana Highway adjacent to the project site. Installation of accel/decel lane along the project site. The third lane has been coordinated with the state and will actually tie into their long term plans for I believe widening Hana Highway at some stage. There also be addition of a second right-turn lane to Kamehameha Avenue/Hana Highway intersection so there'll be two right-turn lanes going onto Hana Highway if you are going upcountry for example. There'll also be addition of left-turn storage lane and a left-turn storage lane to the existing U-turn median opening on Hana Highway and installation of related improvements such as traffic islands, lane striping and yellow posts to guide vehicles exiting the project site and also entering the project site. In regards to circulation, access is primarily through this access point. Vehicles will go under the parking facility in a clockwise direction and will exit at this side of the project site.

Now the construction of the roadway improvements will be coordinated with – by DOT and are currently being reviewed by State DOT. It's important also I think to note that the two vehicle access driveways have been conditionally approved by State DOT as of March of this year.

The final item I'd like to touch upon for the EA is utility requirements. The engineering report that was conducted for the draft environmental assessment estimates that water demand for the project will be approximately 15,000 gallons per day. Fire flow demands for this kind of commercial facility will be 2,000 gallons per minute for a two-hour duration and the plan is to connect to the county water system by an existing 16-inch water line that currently is located within Hana Highway. An application for a water meter will be submitted to the county upon issuance for the building permit for the project.

Wastewater is estimated at 4,000 gallons per day. The plan for the project is to connect to the Wailuku-Kahului wastewater treatment plant which we believe has capacity to service this project and this will be facilitated through an offsite sewer line extension along Hana Highway and Kamehameha Avenue in the vicinity of the Ale House.

Finally, I'd like to just touch upon some sustainable design opportunities that the development team is currently exploring to enhance obviously the green elements and energy efficiency of the Maui Medical Plaza project. These will include various water conservation measures to reduce potable and nonpotable water use, reduction of impervious surfaces through the various design elements one of which includes you know the multistory parking structure which gets away from having large areas of parking surround commercial structures which is common throughout other areas of Kahului. Promotion of energy efficient appliances and lighting and thermal comfort controls within the building itself and also the promotion of alternative forms of transportation, bicycle storage racks and a changing area within the facility will be provided and coordination is currently ongoing with State DOT and Maui DOT to facilitate the development of a bus stop along Hana Highway fronting this particular site.

Other elements include use of renewal energy systems to offset electrical requirements for the facility, use of outdoor corridors to reduce building cooling and ventilation requirements and incorporation of daylight and views for interior medical suites, use of recycling facilities for storage and collection of empty containers. Implementation of a construction waste management plan to achieve recycle and waste minimization objectives. Use of native and water efficient landscaping. Interior/exterior light pollution reduction measures certainly in respect to the proximity of Kanaha Pond to the facility and also use of low emitting materials for various interior improvements that will take place.

Based on this analysis that is provided in the draft EA like I mentioned before it's anticipated the project will result in a finding of no significant impact and in closing, I'd just like to note that again the purpose of today's meeting is to – for the commission to review and provide comments on the draft EA. These comments will then be addressed in the next phase of work which will be taking all of the comments that have come in and responding to them in the final Environmental Assessment which will come to you for review and determination at a later date and then we will come back again for a determination, public hearing on the SMA Use Permit application. Thank you very much as we noted at the beginning of the presentation, we have members of the project team on hand today to answer any questions that the commission has. Thank you very much.

Mr. Mardfin: Thank you very much Mark. We have two things that we can do, we can open for public testimony or we can take questions from the commission. If a commission has something they want to get out immediately lets do that. Seeing none, lets go to public testimony. Anybody wishing to speak on the motion may – Carolyn was there a sign up sheet? Will Maui Tomorrow please speak. Please identify yourself.

Ms. Irene Bowie: Good morning Commission Members, Irene Bowie, I'm the Executive Director with Maui Tomorrow Foundation and I would like to offer a few comments on this projected project.

First off let me say that Mr. McDaniels and Dr. Hansen have been forthcoming as we've had some

questions about this project and we definitely appreciate that and look at this as a first step in the process as we do have questions.

The first point I'd like to bring up is the factor of need with doctors being recruited to Maui. I have a letter from a doctor here on Maui and I've spoken to a number of people in the last couple of weeks in the medical community who do question that a facility is really going to bring doctors here. They question much more the designation that Maui has as a rural area versus a metropolitan area such as Honolulu and I will just quote from this letter. "The overwhelming fact is that the level of reimbursement for physicians is incredibly low for a community as costly as ours. Doctors look at their collections or their paychecks then must pay their staff, buy their groceries, pay the mortgage, pay for schools, utilities, gasoline, etc., and realize that any metropolitan community pays their doctors half again what physicians receive on Maui. The fault as every doctor knows it the Medicare definition of rural and all third parties pay based on Medicare coefficient. This is no mystery and this is why doctors do not stay or more importantly visit and decide they cannot afford Hawaii. Office space is not a problem."

So I would like to just kind of bring that into this to be looked at. In the document it says there's 109,499 square feet of leaseable space. At this point, there's 64,000 square feet no in lease commitments. I would hope if a project like this is in fact built and takes away you know a view plain in Central Maui and has possible impacts on the wetland area that it ends up at least being leased out and it's not another building as we have here throughout Central Maui that sits half empty. We do say this is in the infill area, however, I think it's not really in the spirit of infill when we have so much empty space here. It's sad to have to build on the outskirts of something. You know, we have Maui Lani. We had plans around the hospital. To keep things in an overall plan where you'd really have medical facilities. I understand that these folks have had problems with finding space but it is unfortunate.

I would also like to in the moments that I have mention that this is – I'm glad you have the coastal zone management presentation today because this is in a hazard area. This is in an inundation zone and it's been pointed out by coastal zone management with sea level rise it's not just the ocean that's going to rise, it is the wetlands. So are we starting a really optimistic a six-story project in an area that we may face problems in coming years.

Traffic is a concern. There's a number of things that we need to look at further in this.

Mr. Mardfin: Your three minutes are up. Do any commissioners have any questions of Ms. Bowie?
Commissioner Hiranaga.

Mr. Hiranaga: Yes, I'm just wondering the doctor that wrote the letter, does that doctor have a name?

Ms. Bowie: He asked to remain anonymous letter.

Mr. Hiranaga: So it's an anonymous letter?

Ms. Bowie: Yeah.

Mr. Hiranaga: Thank you.

Mr. Mardfin: Any other questions? Thank you very much. Is there any other person wishing to give testimony? Please come forward and identify yourself.

Mr. Kenny Hultquist: Good morning Commissioners, I'm usually on the other side of the camera as you guys well know but every once in a while something comes up that I really am a little bit passionate about. The only difference between me being up here and you guys being on camera is if I don't like what I say I can always edit myself out.

It's really nice looking building actually it's really great but I really am having a problem with where it is. Even if it doesn't impact Kealia Pond or the wetlands it really feel that it's going to impact the view plain there negatively and I'm really having a hard time believing that there isn't some place else that this really nice building could be built. And I'm sure that there's an urge need for the services being provided by the medical center but really I would like to see some kind of attempt to build the building somewhere else. Thank you.

Mr. Mardfin: Are there any questions for our testifier? Seeing none, thank you very much. Would anyone else like to come forward and testify? Seeing no responses public testimony is closed. Commissioners it is time for us to ask questions and get clarification. Nobody? Commissioner Wakida.

Ms. Wakida: Well, I need to check my notes for a minute, find the reference in the plan.

Mr. Mardfin: Okay. Does anybody else have questions? Commissioner Shibuya.

Mr. Shibuya: Sometimes when I ask questions it seems as though I'm against the project but actually when I'm asking the question is because I want to get down to the points that are of interest that I have or some questions that I need answering. So hope you don't take my questions in the wrong way.

I see several things here that I guess the State Department of Health has already alluded and I assume that these will be addressed would it not such as the Clean Water Act, the Federal Water Pollution Control Act, the National Pollution Discharge Elimination System, I think these are some of the requirements that the State Department of Health has identified in their letter. So I won't go in and ask those questions. I just need an affirmation that yes, the developer will be inspecting or looking at that and complying with them.

Mr. Roy: Yes, they're working with – this is Mark Roy with Munekiyo and Hiranaga, in answer to the commissioner's question the applicant is working with Department of Health, State Department of Health and all other applicable agencies to insure compliance with applicable requirements. One of those requirements is the Clean Water Act that you mentioned that is compliance with those requirements is mid process, the Wetland Mitigation Plan for the project that has been accepted by the Department of Army that deals with compensatory mitigation for the wetland impacts is awaiting one approval which is being processed by the Department of Health which is the Section 401 Water Quality Certification for the project. Once that is issued the Section 404 process will be

completed in accordance with Department of Army regulations.

Mr. Mardfin: I believe Planner Buika wants to speak.

Mr. Buika: Thank you Commissioner Shibuya. Just and for all the commissioners please remember that what you see in front of you all of these agency comments are comments that were produced from an early version not of the draft Environmental Assessment but a request for comment on a subset of the information you have in front of you early on. So the applicant because it is a large project and they have been proactive are working with all of the agencies from these comments and at this point simultaneous with your review today we have transmitted this draft Environmental Assessment out to all of the same agencies so hopefully they'll come back with the same comments but we will have an entire set of comments again that the applicant will address probably more fully thought out comments and more fully addressed. So just realize that these are early comments that these agencies have included about this project and not from all of the information that you have in front of you at this point.

Mr. Mardfin: Any other commissioners have questions or want to make suggestions to the developer? Commissioner Wakida.

Ms. Wakida: I'm interested in more information about this detention basin. According to the plot plans the detention basins are apparently the landscaped areas of the project is that correct?

Mr. Roy: That is correct and if it would be appropriate Commissioner Wakida we have the civil engineer present with us today and he'd be able to give you a good overview as to the design of the retention system. So I'd like to invite Stacy Otomo up if I so could.

Mr. Stacy Otomo: Good morning Chairman Starr, Vice-Chair Mardfin, my name is Stacy Otomo. To answer Commissioner Wakida's question that is correct, the landscape areas would serve as the detention basin both in the front and the rear of the building.

Ms. Wakida: And in the presentation the retention basins were storage, however, the water is intended to seep through, right?

Mr. Otomo: That is correct. When we size the detention basin the county does not allow us to use percolation rates into the design so it's basically storage volume what we refer to as.

Ms. Wakida: Okay, but it is expected to as you said percolate?

Mr. Otomo: That's correct.

Ms. Wakida: Is there a topographical map included in the packet?

Mr. Otomo: I'm not sure if it's an exhibit in there but there is a grading plan that was prepared.

Ms. Wakida: Yes, I see a grading plan but I don't see any – these detention basins go down four feet and I was interested in a topographical plan of that.

Mr. Otomo: It's a topographical map, please understand that the area is very flat so there's not too many contour lines to deal with but the detention basin basically is this whole front area here as well as this back portion of the property right here. The solid lines you see are the grading lines.

Mr. Mardfin: Does anybody have any question of Mr. Otomo? It's kind of useful when I have the person up. Commissioner Shibuya.

Mr. Shibuya: I was very curious about that trapezoidal plot there that is on the east side along side the Hana Highway. Can you describe what's that, how is it going to be used.

Mr. Otomo: Right here?

Mr. Shibuya: No down below the lower right-hand corner. It's a trapezoidal shape.

Mr. Otomo: There's a series of culverts currently crossing Hana Highway right here and it outlets right in this area. I think at the presentation you saw that there was going to be a educational viewing platform. This is where the platform is going to be located.

Mr. Shibuya: So there's no drainage in that area?

Mr. Otomo: The existing drainage will remain but there's no going to be any project related drainage improvements in that particular area.

Mr. Shibuya: And so there'll be some safe because people are going to be there, there's going to be some safety rails along that area so that they'll get into the drainage area.

Mr. Otomo: Brian Maxwell is the landscape architect and has been working on that particular feature so I would defer any questions over to Brian.

Mr. Shibuya; Okay, thank you.

Mr. Mardfin: Any other questions for Mr. Otomo? Commissioner Tagorda.

Mr. Tagorda: I don't know if this subject matter you can answer but I have concern about wetland characteristic in Appendix B of this EA.

Mr. Otomo: I'd like to defer all the wetland questions to our wetland consultant Penny Levin.

Mr. Tagorda: Yeah, okay.

Mr. Mardfin: Commissioner Shibuya.

Mr. Shibuya: I just want – would you please review some of the filtering systems that you have or you're thinking in terms of catching the water, can you describe some of those systems. I know it's very early in the planning stage, but what do you have in mind?

Mr. Otomo: We are looking at the normal standard catch basin inserts. The bulk of the runoff is coming from the structure itself and the mechanical insures looking possibly at some kind oil-water separator before it outlets into the detention basin, but there's no finalized design at this particular point but that's one consideration.

Mr. Shibuya: Okay, and in terms of the highway runoff is the state going to be responsible for that or are you picking up some of that runoff.

Mr. Otomo: What we're going to be doing is we're obligated to put in curb, gutters and sidewalks fronting the project so they would probably be a catch basin involved that would drain into our system.

Mr. Shibuya: Okay, thank you.

Mr. Mardfin: Any other questions for Mr. Otomo? I have one. This is a very massive building, six stories far greater than most of the other surrounding, any surrounding structure. How are you going to insure that it doesn't – what's the underlying structure going to be so that it doesn't depress the land or create subsidence of any sort?

Mr. Otomo: There was ...(inaudible)... report done for the particular project and it acknowledged that the underlying soils because of the condition out there needed a special design for the footing. I'm not the structural engineer or the architect but I can assure you that that has been incorporated into the design as far as what the underlying soils can support for the foundation.

Mr. Mardfin: Are they going to have to drill long I don't know the term, pilings? Thank you.

Mr. Otomo: That was one of the options, I don't recall what the final design is but pilings was definitely an option that was mentioned in the soils report.

Mr. Mardfin: Is the structural engineer here?

Mr. Otomo: No, he's not unfortunately.

Mr. Mardfin: Thank you very much. Commissioner Tagorda.

Mr. Tagorda: Okay, let me get to that building structure thing. There was a comment from FAA that the building might be a problem when they do some maintenance at the R ...(inaudible)... runway that they might use that area over that building to reroute those planes. And they kind of suggest that to attenuate or kind of lower the – design the building in a different way. What's your comment on that.

Mr. Otomo: I was not directly involved in that so I will defer to – I'll let Mark Roy answer the question.

Mr. Tagorda: Thank you so much sir.

Mr. Roy: We have Bob McDaniel who is part of the development team. He's been working in conjunction with State Department of Transportation Airports Division to go through the process of review as to what any concerns that they had with regards to the proposed facility and the aircraft flight paths that were coming from airport. So I'll just let Bob give you an overview if that's okay. I believe there was some kind of clearance documentation issue from the Airports Division in that regard.

Mr. Bob McDaniel: Good morning, Bob McDaniel, development partner in this project. There was a – there's a specific form and an approval that's required from the FAA with regard to development in the airport impact area and twice we have received that approval from the FAA. It's separate from the DOT Airports Division and their concerns with attenuation for use of I think it's Runway 5, it's the seldom used runway at the airport but on occasion that runway and during maintenance of the other runways that runway would become more utilized and the architect and I and the constraints of the site limited what we could do in terms of making sixth floor the smallest floor and locating the elevator tower in the least projected area of the flight line. But they're very general DOT Airport concerns when it comes to Runway 5 and utilization of that flight path. The specific FAA approval rules out any direct interference from the elevation of the building. So the rest of it is kind of conjunctive working together with the occasions when that runway will be utilized. Our tenants will have to realize that at times the flights are going to be more frequent and on windy days sometimes the approach is more direct and drops lower and sound proofing will be increased on those top two floors. It's just one of those sort of give and take relationships and design of the upper two floors.

Mr. Tagorda: Thank you sir, and can I follow up?

Mr. Mardfin: Please.

Mr. Tagorda: I saw some pictures about the project. It's a six story and it shows on the south view plain – you know it's a good picture but can I ask in reality if you built your building six or eight can I have a view plain on all corners of that building from Hana Highway, from the airport, from the ocean so at least I can see.

Mr. McDaniel: That's a reasonable request I can see and we've discussed it as a team for example taking a piece of equipment out there. Like I said it's – and at each elevation for the second floor, the fifth floor, and the sixth floor taking perspectives outward in each north, south, east and west direction and then back across perhaps where the facility would be located. So yes, I could provide those for you.

Mr. Tagorda: Thank you. You folks discussed about educational view platform. You can see the Kanaha Pond and all that, I get some additional information how this is going to be accomplished and what floor is going to be built or is this an extra viewing ..(inaudible)...

Mr. McDaniel It's a separate structure and that trapezoidal area on the diagram that Commissioner Shibuya referenced is not planned for any utilization of the facility. The property obviously has those two sort of ears on the right-hand side and on the left-hand side. The viewing platform was sort of an incorporation for the sensitivity to Kanaha Pond. We anticipate Dr. Duval using it from

time to time with he said perhaps interns that do work there, for classes that come by or teachers that want to talk about the history of the fish pond and the way it's managed now through DLNR. And it's a separate structure and it's very small, and very – you know, it's going to be landscaped I think Brian Maxwell the landscape architect proposed them maybe even 10 x 10 not even that big.

Mr. Tagorda: Thank you Mr. Vice Chair. I'm going to give my fellow commissioners chance to ask questions, more questions . I have more questions to ask. Thank you.

Mr. Mardfin: Any other commissioners? Commissioner Shibuya.

Mr. Shibuya: Since we have Mr. McDaniel here I was wondering where the flight pattern would be. From the top view is it close to where this structure is going to be. My thought is that it's not.

Mr. McDaniel. It is.

Mr. Shibuya: It is okay.

Mr. McDaniel: And having spent 50 months on this property with various people and consultants and engineers and the architect some of the inter island flights have come over directly over the property. I don't know how much latitude the pilots have in communications with the tower and how they approach different runways but there are flights that come I'm not a good judge in height but there are flights that come directly over the property.

Mr. Shibuya: Okay, now this is a situation where the left hand is not talking with the right hand. I'm very interested in the Kahului Airport Master Plan and its implementation. Currently Runway 2 is in dire need of repair and how they're going to fix it is using – extending Runway 5 and using the traffic, diverting the traffic to Runway 5 or they can run a parallel Runway 2 and extend it and that would alleviate some of the traffic. But as you know, Maui needs this type of airport facility and it needs some access to it. If you build a structure, and it's already a hazard now. to Runway 5. Would these considerations be coordinated with Airport Division?

Mr. McDaniel: They were. The project that wasn't deemed a hazard and it has received FAA clearance as not being a hazard. And I have heard you discuss the airport growth and master plan at other meetings. The left hand and the right-hand talking, the FAA and the DOT Airports it's a question that I don't have an answer to. The facility, we received the finding that it was not a hazard, it didn't impede any air traffic and we proceeded ...(inaudible)...

Mr. Shibuya: So if you could at least provide us some kind of pictorial chart that shows this flight pattern and how far away is it from your structure that would be helpful for me.

Mr. McDaniel: Sure.

Mr. Shibuya: Thank you.

Mr. Mardfin: Can I follow up on that? I think what I would like to see in there, I have the same concerns maybe a map showing what – including the airport and what the flight patterns tend to be.

When it goes over the building at what height does it go over?

Mr. McDaniel: That's a question we need to answer, I don't know that.

Mr. Mark Roy: This is Mark Roy of Munekiyo and Hiraga. Just to kind of add some supplemental information into this discussion. There was some coordination as Bob had mentioned previously with State DOT to the Federal Aviation Administration. They have a form that they require to be submitted for development in proximity to aircraft facilities. I'm not sure exactly what the form code is but it's referred to as a Hazard to Air Navigation Determination Form. That form was submitted for this project to I believe the State DOT office and we have that document in the draft EA. It's not unfortunately as easily locatable as some of the appendixes I had to search myself, but as of July 30, 2009 there was determination of no hazard to air navigation as a result of that form that was submitted for this particular proposed structure. So there has been some level of review being conducted by the Federal Aviation Administration specific to this project. I'd just like to add that.

Mr. Mardfin: Commissioner Tagorda.

Mr. Tagorda: Go, finish up.

Mr. Mardfin: Mark that's good that it's in there I think what Commissioner Shibuya and perhaps Commissioner Tagorda and myself are asking is that there be a more – in the final EA – we're giving you comments for the final EA, in the final EA there should be a much more extensive discussion of this including maps and height, views and that sort of thing including the airport.

Mr. Roy: And we can certainly do that.

Mr. Mardfin: Commissioner Tagorda.

Mr. Tagorda: Mr. McDaniel, I have some concern why this place was picked for your medical plaza. How much effort was done to look for another place?

Mr. McDaniel: A lot. The principal developer for the project is a gentleman named Ben Brown and I'm a real estate broker here on Maui and he did approach me to find a location to develop a new home for the Maui Clinic after Dr. Hansen approached him and they had a discussion about the concept. If you could take you back in time to late 2005, early 2006 when Maui Land and Pine was going strong and Kahului Town Center plans were going strong and there was very little land available in Kahului or within the parameters that the Maui Clinic physicians wanted to relocate where we could build a facility and I repeatedly contacted the state about the old armory site and that was given to DLNR to use and they continue to use and they declined. In today's market they might be receptive to a \$3 million offer. We bought this property for \$3 million on 2006 just about the height of the market. We spent six months in contract negotiations with the Okada Family for the property between Harbor Lights and the old Cutter Nissan location and they ultimately decided not to sell the property. Maui Land and Pine their headquarters over on Wakea Street wasn't for sale at the time. Weinberg Foundation asked me, Bill Dornbush said Bob stop calling we don't seel property, we're a \$2 billion trust. We don't sell, we buy. So A&B didn't have any land for sale there was very little land to choose from. I had approached this landowner earlier and he said, his name

was Vernon Lindsey and Vernon said I have my own plans for that site. And I approached Mr. Kitagawa who owns Lot 6 in this subdivision and his lot is technically larger than ours but poorly configured. We thought maybe we could use it. He has access to Hobron Avenue and perhaps traffic measures would be more favorable there, Mr. Kitagawa declined to sell. He had bought the property there and he wanted to own his own land for his facility. There was just very little to choose from. We spent almost a year on specific properties and 18 months just looking at general property.

Mr. Tagorda: Okay, lets say if you were able to get all the permits required necessary to build this project you have some pre construction plan that you have now?

Mr. McDaniel: Our goal is to build the shell and the core of the facility and then let each of the tenants build out their own space. And yes, we have building plans for the shell structure and they've been submitted to Maui County and they're waiting SMA/EA processing.

Mr. Tagorda: Because I know this is a very humongous project to undertake and Hana Highway everybody knows here it's just a problematic roadway and we don't know whether the widening is going to happen or not. So that's my concern, traffic, the wetland and whoever, who knows. I had so much concern about the project. I need some kind of additional information when this project is coordinated to the proposed widening of the Hana Highway is it going to happen before the widening of the Hana Highway – what are those adequate mitigation measure that should be implemented before this project should be initiated or be constructed because I don't want the Hana Highway to be in ...(inaudible)... traffic and a lot of ...(inaudible)... you know.

Mr. Roy: To address Commissioner Tagorda's question as noted earlier we do have the traffic engineer here today. He was the person responsible for the preparation of the traffic impact assessment report that was contained and discussed within the draft EA. So if it's okay with the commissioner I'd like to invite Mr. Warren Yamamoto and if necessary, Lloyd Lee to come forward and give the commission an overview as to the findings, the traffic report and also the mitigation that's being proposed for Hana Highway.

Mr. Mardfin: Before we call him up I believe Planner Buika wants to make a comment. Yes, I'd just like to make one comment that we're asking a lot of questions. Our purpose today is certainly to ask the questions but if you do not feel the question is fully answered please direct it into something substantive that that will be added to the final Environmental Assessment. Okay, so give me some language that you would like to see included in the environmental assessment. That's what we're trying to capture here today. Just for clarification, yes.

Mr. Tagorda: Thank you Mr. Buika. I just want to you know, bring up all this concerns that I have for this project. I'm trying to visualize what's going to happen when this project goes on and be initiated during construction, preconstruction and after the project is finished if it will go. So that's my concern. I don't know if this project is going to be good for that place there, I don't know, I really don't know. You don't know either.

Mr. Buika: Right, we're looking at the – at this stage we're looking at the environmental impacts and the environmental assessment is an informational document to disclose potential environmental

impacts and the mitigation measures that will be taken by the applicant to minimize those environmental impacts. So our ultimate goal is to hopefully do a finding of no significant impact at the next time we visit this final environmental assessment. So it's critical that we capture today. Any additional information that you like seen such as the flight pattern. All of the conversation I got a – you know the view plain, your view plain analysis from each floor looking around. So any type of additional information so that you understand the impacts exactly what you're saying that there are traffic concerns, there are other concerns, how do we capture that? So we need to ask the applicant to add in additional information at this stage today.

Ms. Mardfin: I believe Ms. Cua wants to make a comment also.

Ms. Cua: Yeah, just to try and keep us on task. I think this is the time for questioning and answering at this point in time so that you can get to a point where you can give comments. So we want to clearly distinguish where we're at right now to where we're going to be because a question may not end up being a comment from the commission because when we go through comments for us to include it on the letter we need to make sure the comment that is being expressed is the commission's comment not only one members comment. So again we don't want to get confused between and this is more for the planner's sake who's going to be taking the comments that we're not taking comments at this point in time, we're hearing your ideas, we're expanding upon them, we're getting answers, your questions may be answered, they may be not. Based on that, you're going to come forward with a comment. And just a note on the department's side we, too, will be filing a separate comment letter.

Mr. Mardfin: So commissioners in light of what has just been suggested to us I think we can ask our questions now, we can get some of the answers but make notes to yourself when we get to the comment stage, things you're going to want to bring up and make sure it get included in the comment letter. So make little notes to yourself and we'll make sure we'll come back to that. Commissioner Starr.

Mr. Starr: I'm going to ask a question. I won't be making comments later but I will ask you a question that I'm curious about. I'm a commercial pilot, Runway 2 was our only instrument runway on Maui. I'd like to know whether the FAA has been asked that if Runway 5 is lengthened to commercial standards and since the flight path for Runway 5 runs right over this, where they're having this built to the height as proposed will prohibit th FAA from instituting an instrument approach. In other words, an approach that can be used in bad whether for our second runway, Runway 5. Has that been asked?

Mr. Roy: Thank you Chair for that question. We don't have a specific answer to that special question at this point. As I mentioned previously there is a form that has been filed and will need to be filed I think on a yearly basis or something around those. It needs to be regularly updated so that the DOT and FAA can review the project in the context of I believe their current operations. So that form will continue to be filed throughout project implementation, but in regards to that specific question we can certainly take that down as a comment and try and find an answer for you before we come back for the final EA.

Mr. Mardfin: I believe we were moving on to traffic.

Mr. Warren Yamamoto: Good morning. I am Warren Yamamoto with AECOM Pacific. I did the traffic impact study for this particular project and we followed the standard procedures ITE practices. We looked at the existing conditions. We looked at what other projects will be in the area and how they would contribute to the traffic which you call the ambient traffic, then we did a trip generation analysis for the proposed project. Added it onto the ambient traffic volumes and then we did a level of service analysis at the various study intersections to determine what would be the impact of this project and as we noted Hana Highway is a problematic facility but we are, have proposed a mitigate – working with the State Department of Transportation we have developed a series of mitigating measures to accommodate traffic generated by this project. You have any questions?

Mr. Mardfin: Any questions have any specific questions they want to ask of Mr. Yamamoto? Commissioner Wakida.

Ms. Wakida: I was noting in a letter from the Department of Transportation that they oppose the location of the proposed driveway on the eastern side of the property. Is that addressed?

Mr. Yamamoto: They have already given – this was very early letter. They have already given a conditional approval for that driveway.

Ms. Wakida: Thank you.

Mr. Mardfin: Commissioner Tagorda.

Mr. Tagorda: Good morning Sir. On that proposed two lanes to four lanes on widening of Hana Highway opposite the project the acceleration and deceleration road yeah to your project going in, going out is that going to be a part of the Hana Highway or it's going to be a part of that project?

Mr. Yamamoto: If the project is not built that acceleration/deceleration lane will not be there, but with the project it will be there and the third lane I guess would be part of the Hana Highway project but I guess we are putting it in ahead of time when the project gets built so that it will be there when the state widens their Hana Highway.

Mr. Tagorda: Okay, my question is is that going to be a part of the six-lane widening of Hana Highway the acceleration/deceleration, proposed acceleration/deceleration roadway?

Mr. Yamamoto: Lloyd Lee worked with the DOT on that.

Mr. Lloyd Lee: My name is Lloyd Lee. I am with the client as far as the traffic improvements. I've been working the state for about a year and a half on this project specifically and it has been very intensive as far as what they wanted and to mitigate the traffic. The improvements that are shown there as you're referring to we had to come up with some kind of stand alone project to mitigate all the traffic improvements knowing the state has future desires as far as the six-lane highway and they were unsure what they really wanted. However, in final analysis as far as what we presented to you today would make the project stand alone and improvements would improve the traffic situation on Hana Highway and Kamehameha Avenue at Hobron Avenue. Right now the state is

still undecided as far as monies and funding for future improvements. They also have projects like traffic signals at Wakea and Hana Highway. So when that happens our left turn to the project site will be closed and we use the intersection of Wakea and Hana Highway for access to the project site. So the left turn lane on Hana Highway will be closed off.

But as I noted this project without – can you put the listing as far as – yeah, if you look at the listing it's been very intensive as far as what they want in relation to mitigate all the not only project related but future related improvements as far as for the highway itself. So the major intersection Hobron/Kamehameha and Hana Highway is a major problem area now and no matter what we do as far as even the state in the future that intersection will still be a problem.

However with this stand alone project per se in advance of what the state plans to do would mitigate or improve the delay times. In other words, instead of maybe two or three minutes at the intersections it would be less than that. So no matter what we do, with this project we will improve traffic circulation as well as traffic delays at that intersection and on Hana Highway.

The third lane as far as working with the State Planning Department even now they're not sure you know, how the geometrics is going to happen but what I did working with the state agency here with Fred Cajigal and Charlene Shibuya we came up with a kind of draft location where the third lane would be. So what we wanted to do and for this project was to build something that would not be conflict with future improvements. So basically the third lane as shown on this plan will be the third lane of the six lane improvement.

Mr. Mardfin: Commissioner Starr.

Mr. Starr: How does this third lane affect the bike path and pedestrian safety through there?

Mr. Lee: It does not. Actually the bike path as it exists there, there's no bike path on Hana Highway fronting the development. There is a future proposed bike route per se that's already incorporated in the permits for this project.

Mr. Mardfin: Commissioner Shibuya.

Mr. Shibuya: Lloyd can you at least use that diagram rather than use this list because I have a simple mind. If you can show us the trip generation. Just go through the process and say, well this light will take about eight cars or four cars. The total cycle will be about five minutes. Hana Highway would be passing through approximately 40 vehicles. You know, I don't know. Can you at least describe that entry, the number of vehicles the various routes in which they would enter from the Hana Highway as well as from Kamehameha as well as the opposite direction of Hana Highway. Just a descriptive type of thing and show us on that map.

Mr. Lee: Okay, I'll defer that to Warren because he did the initial analysis.

Mr. Yamamoto: If someone is coming from the Hana Highway or Dairy Road they'll be coming up Hana Highway in this direction and they'll turn in and when they leave they'll come out this way and they'll leave, and if they leave from here they can make here and then ...(inaudible)... to down by

the airport side or Dairy Road. If they're coming from Wailuku they'll just come down Hana Highway and before the traffic signal at Wakea is installed they'll make a left turn here, they'll go through here and they'll come out and they'll go this way back to Wailuku. That's ...(inaudible)... this is Kamehameha Avenue here, they would come in this way and then make the turn here and then when they come out they may either – if they come out from here they get to the left turn and get back to Kamehameha Highway or if they come out of here they would go up pass the intersection, we're providing a U-turn up pass the intersection that they can come back down this way to go to Kamehameha Highway or even those from Hana Highway when they do that movement, U-turn movement to come back and we're improving the U-turn that is past the intersection, Hobron/Kamehameha intersection. Did I answer your question?

Mr. Shibuya: Yes, and yet it added more questions unfortunately because you now have three lanes and you're going to have that person come in the right lane – enter the right lane and then you have to get all the way to the left lane.

Mr. Yamamoto: Again, that's why we are depending on the time of day when traffic is heaviest they will probably just go past the intersection and come around. But when traffic is lighter they'll be able to get to this lane. We have – we are putting these various traffic ...(inaudible)... yellow posts here so people coming out here cannot get here, but people back here could do that.

Mr. Shibuya: Right. Also at the entrance I see a crossing pattern of traffic just like Baldwin High School entrance. You see the same people coming in and people getting out and they have to cross each other.

Mr. Yamamoto: You mean over here? The amount of traffic that we predict will be generated would be I think it won't be as heavy as the school traffic and the problem with school traffic is that they are very intense short period, high volumes and it's very difficult to design for them, but for this one it should not be as peak and – so that you – the volumes should not be as heavy as the school traffic even though ...(inaudible)... seem to be a similar geometry, what may work for a lower traffic volume may not work for a higher traffic volume. And eventually this will when the Wakea intersection is signalized this will be closed and I think that will disappear also, they'll do this movement and make a U-turn and come in. And that depends on the state's development of this traffic signal at Wakea Avenue.

Mr. Mardfin: Mr. Yamamoto, I don't think we're finished at traffic but we've been at this for an hour and half so we propose we take a five-minute recess. We will come back and still be dealing with traffic. Meeting recessed for five minutes.

A recess was called at 10:35 a.m., and the meeting was reconvened at 10:48 a.m.

Mr. Mardfin: I believe we can continue with our questions. We were last dealing with traffic issues and I believe Commissioner Tagorda was in the middle of asking a question.

Mr. Tagorda: I can ask question, I think somebody else there, but I can ask question.

Mr. Mardfin: Okay, Mr. Shibuya will be next. Commissioner Shibuya will be next.

Mr. Tagorda: Sir going back to traffic. Either one. This map here Hobron is a signalized intersection.

Mr. Yamamoto: Hobron, Kamehameha and Hana Highway. It's not on this particular map, yes.

Mr. Tagorda: And at this stage Hobron is having a level of service E now? And it's going to go to F when this project come to fruition.

Mr. Yamamoto: It will go to level of service F without the project.

Mr. Shibuya: In the morning time or afternoon.

Mr. Yamamoto: Afternoon yeah.

Mr. Tagorda: And that two mitigation measures that you folks propose is doing two right turns on Kamehameha Avenue.

Mr. Yamamoto: Yes.

Mr. Tagorda: And Kamehameha Avenue is it wide enough to make those three lane?

Mr. Yamamoto: As we were explaining to Commissioner Shibuya it is. We can make it, we can design it.

Mr. Tagorda: Okay. At DOT standard.

Mr. Yamamoto: Yes. Actually it's a county standard.

Mr. Tagorda: County standard. Okay. Now, and you said too that the widening of the Hana Highway will mitigate that proposed project, but – so there's ...(inaudible)... there, that this project is not going to be mitigated with only Kamehameha Avenue doing two right turns and one going to Hobron.

Mr. Yamamoto: The way it would help the intersection improve its traffic operations and help Hobron Lane also is that right now we have what is called the split phase. First Hobron lane gets the green and their traffic goes, then they stop that traffic, then Kamehameha Avenue gets their green and that goes. And that is a very inefficient traffic signal operation. But by having the double left, right turn lane we cut the time off of the – green time for Kamehameha Highway –Avenue, Kamehameha Avenue and we can give more green time to Hobron and to the Hana Highway. So that helps improve the intersection operation as a whole.

Mr. Tagorda: Okay, lets go to Wakea Avenue which is not signalized. So if you do signalize Wakea Avenue will there be some kind of mitigation measure – it will mitigate the problem of traffic there?

Mr. Yamamoto: Mitigate the problem of what? I didn't catch what –

Mr. Tagorda: The traffic mitigate. Is it going to be a good mitigation undertaking if you signalize Wakea Avenue and Hana Highway?

Mr. Yamamoto: I think it will because you always have the turning volume there already into Wakea and those are very poor levels of service right now as an unsignalized intersection but it would also be a mitigation – a mitigating measure for this particular project in that we can close this left turn and have them make a U-turn, safer U-turn movement at the traffic signal. So it's not only a operation, but it's also traffic safety, it improves traffic safety.

Mr. Tagorda: Okay, that's good explanation. Then lets go back to the –

Mr. Mardfin: Commissioner Tagorda, can I give Commissioner Shibuya a chance?

Mr. Tagorda: Sure go for it.

Mr. Mardfin: Commissioner Shibuya, you wanted to ask some questions.

Mr. Shibuya: Yes, in terms of we all heard that word, I mean, the saying, "time is money," and Hobron Lane is another concern that I have. The reason why is because it has a direct impact on the citizens of Maui, the residents as well as the visitors as well as the operation. If you delay the transfer of the cargo and supplies and movement of these commercial items you actually pass the cost onto the consumers and we're – I'm actually very concerned about that in terms of getting the good unloaded from the vessels and delivered on time or in less time to each of the suppliers or people who use these materials. Does this increase the amount of time going through Hobron Lane?

Mr. Yamamoto: You mean having the double right turn lanes?

Mr. Shibuya: Not necessarily the double right turn, but everything, the whole total picture here. Does that impact adversely the movement of cargo from the harbor?

Mr. Yamamoto: You mean the proposed project traffic from the proposed project?

Mr. Shibuya: Yes.

Mr. Yamamoto: We'll have an improvement because of the improvements that are being put in by the project at the intersection. So you should have a better traffic performance on Hobron Lane which would interpret into little faster deliveries.

Mr. Shibuya: Okay, so now you have this signalized at Kamehameha Avenue, Hobron and Hana Highway what is the time right now and what would be the time wait if I were on Hana Highway or Hobron or Kamehameha, what is the wait time?

Mr. Yamamoto: I would have to look that up in the, you know, the appendix of my report, I don't know if I can give it to you right now.

Mr. Shibuya: And so if you can at least provide that next time. I don't need it right now. But in – if you will prepare something to that effect, a scenario in terms of the impact of the cargo coming through Hobron Lane.

Mr. Mardfin: He'll mark that down now Commissioner Shibuya but when we get to the comment phase would you please reiterate. Commissioner Tagorda did you have another question?

Mr. Tagorda: Just a minor one. I'd just like to know how will they handle the construction phase of the project? How can you avoid Hana Highway while the project is ongoing?

Mr. Yamamoto: I did not study that. Maybe Lloyd will be –

Mr. Tagorda: Can I have some kind of you know idea?

Mr. Lee: Lloyd Lee again. What do you mean by avoid Hana Highway because –

Mr. Tagorda: As much as possible avoid Hana Highway when you doing the construction phase.

Mr. Lee: On the onsite improvements it wouldn't be a problem except for vehicles, construction equipment going on and off Hana Highway as access. That's the only access you have for construction vehicles. However, there is also as you know, we are planning to construct a third lane for say DOT that is on Hana Highway right a way so there's no way of getting around not working on the Hana Highway. We are going to work on the Hana Highway, however, the use of the two existing lanes will remain the same. We will not close off the existing lanes per se during construction.

Mr. Tagorda: Have you study or look into using Kaahumanu Avenue, Hobron around the project site for your access, ingress, egress to the project while the construction is going on?

Mr. Lee: Well as part of the future detour plan I mean you cannot close off Hana Highway. I mean you cannot say okay, I'm going to close off Hana Avenue and you use Wakea Avenue to get to Puunene Avenue and then to Kaahumanu.

Mr. Tagorda: No, that's not my point Sir. My point is if you have study or look into Hobron and Kaahumanu Avenue for your – when you are doing your construction.

Mr. Lee: During the construction we do not have to use Hobron Avenue. It wouldn't impact the construction as far as the roadway improvements fronting the development. Kaahumanu Avenue actually is – well, Hana Highway is the frontage name of the road. Kaahumanu Avenue is when you pass that, you know that curve section is Kaahumanu Avenue, but there would be no detours as far as adjacent improvements. The two-lane facility will remain a two-lane facility as far as the use of Hana Highway. Of course, as we do the improvements adjacent, the third lane improvements we might take a portion of the existing lane but we will still provide two lanes of traffic.

Mr. Yamamoto: Warren Yamamoto again, usually those traffic construction management plans are

done when the plans are being developed, I mean, the detailed construction drawings and we're not there yet. So that will be addressed at that stage.

Mr. Mardfin: Does anybody else have questions about – Commissioner Freitas.

Mr. Freitas: The road improvements is that going to be done simultaneously with the project or is it going to be done prior to the project?

Mr. Lee: Well, put it this way, I cannot represent the client as far as what it is but basically the improvements or the planned improvements for the off site improvements, adjacent improvements must be approved as far as construction plans prior to the issuance of the building permit. When the building is completed, they cannot get a C.O. until such time the adjacent improvements is completed. So basically all will be completed prior to opening the building.

Mr. Mardfin: Are there any other questions? I have one real quick, nit picky one. On page 40 of your report.

Mr. Yamamoto: Which page is it?

Mr. Mardfin: I'm looking at Table 2.

Mr. Yamamoto: – draft EA.

Mr. Mardfin: Maybe Mark can help you. It's on page 40.

Mr. Yamamoto: Okay.

Mr. Mardfin: I just am really curious about something. I looked at the two columns, the 2013 ambient in other words what you project it to be without the project and the 2013 total high and I'm looking at row 2, Kaahumanu Avenue, Wharf Street Maui Mall delivery and I'm looking at the P.M. peak hour and under ambient it's level B and with the project you're up to level A and I don't understand how adding traffic to the project can improve the traffic.

Mr. Yamamoto: Sometimes the mix of traffic, this is a great mystery with the traffic signal timing program also but what happens when you have a certain mixture of traffic even when you increase the traffic you have greater platooning so that you have better traffic flow with high traffic volume.

Mr. Mardfin: I'm a tad skeptical but I won't go –

Mr. Yamamoto: That's how the traffic signal program operates sometimes and you say what, but that's what it does, okay.

Mr. Mardfin: Okay, the third line had the same thing but for the A.M. hours .

Mr. Yamamoto: Yeah, but again that is – just because you have better platooning of traffic.

Mr. Mardfin: Okay, so are there any other questions on traffic? Shall we push on to I believe there were some questions about the wetlands, maybe we could get our wetland person up here.

Ms. Penny Levin: Aloha mai Commissioners, I'm Penny Levin.

Mr. Mardfin: I believe Commissioner Tagorda earlier had questions about wetland and we didn't want to leave you out.

Mr. Tagorda: Good morning. I have some few concern about that Kanaha Pond.

Ms. Levin: Yes.

Mr. Tagorda: I read some of that comments or letters from the Department of Water and Wildlife State Department and they have some good reason why we should really rehabilitate this wetland that we have now and they said that development really does encroach on this wetland and over the years we have diminished and we lost a lot of this wetland. We have now 31 wetland in the State of Hawaii I guess and they said it's really the development that encroaches this and kill this wildlife habitat. Would you tell me if doing a huge undertakings in that piece of land that the Kahana Pond and the surround environment will not be impacted by this project and on what basis.

Ms. Levin: The project lot itself is a severely disturbed portion of what used to be the larger wetland which came into Kahului and expanded beyond the harbor and over time the developments that have happened in the pond itself you know when the Navy was there and ...(inaudible)... attempt is to drain it, it severely reduced the wetland area. The project itself is not going to impact the wetland. It's a contained site that's been set aside with the Department of Land and Natural Resources and it's limited in restoring further boundaries right now because of the airport and because of the designation of industrial lands on all of its other sides. In terms of the larger picture of wetlands overall in Maui County being reduced, this project will actually enhance five additional acres. We really wanted to do it in Kanaha Pond and we worked very closely with Fern Duvall on that and the concern from the FAA was that we would increase the bird population in the wetland and so they asked us not to do it there and we tried very hard to find an immediate area within the watershed and couldn't find anything so we moved to the Maui Coastal Land Trust Waihee site and in that project site we will actually be improving five acres that are currently completely covered with trees and other vegetation which is dried up a portion of the wetland and so we'll be taking those out and putting native vegetation back in so that there's more habitat for the birds.

Mr. Tagorda: I have with me in front of me, a letter from State of Hawaii Department of Planning, Natural Resources and they are really strongly opposed to this, you know, development if it's not going to be adequately mitigated.

Ms. Levin: That is correct. That's a letter that came in quite a while ago and we worked very closely with DLNR on the mitigation. They were extremely pleased with the proposal that we had put in initially to Kanaha and as I said, disappointed when we had to move out of that project to Waihee. But in terms of what the project is going to do in that mitigation we've had a very good supportive response from them.

Mr. Tagorda: And also Department of Water Supply they have some kind of good benefits that they said about having wetlands. A lot of those nice things about having wetlands around those industrial areas. I read those things too and I kind of you know impressed.

Ms. Levin: I'm not sure what you're asking.

Mr. Tagorda: Yeah but what I mean to say is I just cannot – I have concern about losing this wetland because of this project. I need to have some kind of mitigation process that I will be convinced that this is not going to be destroyed completely from us.

Ms. Levin: This particular lot as I said is highly disturbed. A lot of the fill that came from the Dairy canal and from dredging the harbor over many decades ended up in this lot. So the point .94 acres that were considered to be jurisdictional wetland were highly disturbed. We're actually expanding the wetland mitigation to five acres. So you're getting a return of an additional four acres of improved wetland that's added to the total amount of wetlands in Maui County.

Mr. Tagorda: And the canal you mentioned it looks like to me there's always water there it's stagnant it doesn't percolate so if you get more runoff onsite and offsite especially on the roadways, Hana Highway which is going to be widened, I believe those things should be addressed yeah.

Ms. Levin: I'm going to defer that question actually to – that's a runoff question, the canal itself actually is A&B's irrigation canal that takes water from all of Kahului Industrial, actually goes out beyond the wetland. So it's not a stagnant canal, it does move.

Mr. Tagorda: Why is it that instead of rehabilitating this Kanaha Pond a little bit why is it that the concentration is going to Waihee wetland?

Ms. Levin: As I said the FAA basically said if we were only going to do one acre of mitigation that that would be acceptable but when we moved it to five acres in exchange which the Corp had encouraged us to do they were very uncomfortable with that because the increase in the number of birds would be a threat the airport.

Mr. Tagorda: I kind of like to rehabilitate Kanaha Pond too because we are destroying it.

Ms. Levin: Yeah, unfortunately that's an issue that is between the Fish and Wildlife Service and the FAA and we got caught in the middle of it and so it's something that we can't address with our project.

Mr. Mardfin: Commissioner Tagorda when we come to the comments section maybe you can ask for a fuller development of why – it's one of the letters but in their final EA they could elaborate on why they're not doing it at Kanaha and they are doing it some place else, but remember that for the comment period. Do any other commissioner have a question? Commissioner Freitas.

Mr. Freitas: Yes, you basically telling me that you folks are land banking the Waihee site in replacing the Kanaha site. So you're developing that five acres and giving up that one acre.

Ms. Levin: We're actually tasked by the Corp to replace the wetland that will be lost so in our discussions with them they approved us to improve five acres somewhere else. The first desire was of course to do it within Kanaha we were not allowed to do that and so we had to search for an alternative site and we'll be doing that at Waihee. That improvement at Waihee will be in perpetuity so that Maui Medical Plaza project will be responsible for keeping that as a high quality wetland restoration project.

Mr. Freitas: What is the altitude over there about sea level, Kahana Pond. How far is it above sea level?

Ms. Levin: It's less than 30 feet, less than 20 feet I think.

Mr. Freitas: Yeah, because on the runoff if you're going to improve the highway you're going to have greater runoff and then entering right next to the project you have another entrance that's going back to Kitagawa's scrap yard and that shopping center area so you're going to have additional paved area for the runoff. You're going to have far more runoff than I think you folks have what do you call projected because you have that development next to you and it has not even been built yet. He's in the process of building and paving that whole area so the runoff I believe is going to be greater.

Ms. Levin: I think that's a question for our engineer.

Mr. Mardfin: I think we should deal with the runoff issue, but lets see if we can finish with wetlands. Commissioner Shibuya.

Mr. Shibuya: I just wanted to find out how you're going to be treating the foundation because right now on page 14 you say that the water table is normally within the depth of 30 inches from the surface but yet there is a designated area that's called wetland and you say it's damaged and it can't be restored so the tradeoff is doing Waihee which I like. I mean, you expanded it and you've also helped move the birds from the flight pattern. I was wondering how you're going to do this structure on such a – on a ground that is only about 30 inches from the water table and apparently you're going to have some fill and possibly even pilings. Could somebody address that?

Ms. Levin: Mark Roy.

Mr. Roy: Mark Roy, Munekiyo and Hiraga. Commissioner Shibuya's question relates to the foundation work for the proposed Maui Medical facility. There has been a geotech report done for this particular project that analyzes the soil conditions and puts forth recommendations for the foundation for the new facility. We unfortunately don't have the structural engineer with us today but you know that's certainly like the Vice Chair mentioned earlier, that's certainly something that we could take away from today's meeting and incorporate more added discussion on the foundation work for the project if the commission wants us to do that.

Mr. Shibuya: And also I know that the channel or drainage is not your kuleana or is one side of the drainage canal your kuleana. Is it part of the development?

Mr. Roy: The drainage canals to my understanding are completely separated. They fall under a separate tax map key and they're owned and maintained by A & B. So none of the drainage canals relate to Lot 8 which is the parcel for this particular project.

Mr. Shibuya: Okay, and that trapezoidal parcel there that has these drainage pipes or conduits coming under it that's kind of puzzling. That trapezoidal area which looks like you have a few lines there drawing up that's drainage pipes, conduits. And then you just said that that was A & B's property but yet it is your property?

Mr. Roy: I believe that the drainage canal itself goes under the land at the particular point. Let me just get clarification on the question if you give me a couple of seconds.

Mr. Peter Horowitz: Peter Horowitz. The drainage canal itself, the separate lot is actually owned I think Mr. Kitagawa purchased that lot as well. A & B used to own it all and has an easement for the full drainage canal. It runs along Mr. Kitagawa's lot and then underneath for those conduits. The conduits do go underneath our property and our property is encumbered by A & B's easement the same way Mr. Kitagawa's property is. So at one point A & B owned all of this land and when the subdivision occurred, they built it a retained easement. So we're – again, I don't know the full development plans but those aren't going to be disturbed. We can disturb those. It's up to A & B to maintain them as part of the overall Kahului drainage.

Mr. Shibuya: Thank you.

Mr. Mardfin: I believe Commissioner Wakida had a question.

Ms. Wakida: Yes, I have a concern for the wetland expert. And I am concerned of course about the impact of this project on the wetlands, the Kanaha wetlands and I would like to see more information about light pollution from this project on the wetlands.

Ms. Levin: The mitigation plan does describe that. All of the lighting for both construction and the facility will be shielded per recommendations from Fish and Wildlife for native birds and the windows themselves will also be the type of glass that will prevent birds from banging into them. During the project construction there will be someone observing to make sure that there's no disturbance going on. There are currently no birds that are on that property at all. They stay inside the wetland.

Ms. Wakida: True, but I'm interesting in you know, light pollution has been a problem with shore birds and you've got a six-story parking structure that abuts the Kanaha Pond and that will be lighted, correct. And then office building itself will have lighting left on at night.

Ms. Levin: That I don't have an answer.

Ms. Wakida: So these are concerns that I have about the long term effect of light pollution on this area.

Ms. Levin: We'll get that information to you.

Mr. Mardfin: So Commissioner Wakida when we get to the comment phase you're gonna want to have some sort of recommendation that they improve their discussion that I believe. Commissioner Tagorda did you have.

Mr. Tagorda: One more question about wetland before you sit down ma'am. I don't know if you or anybody else went to that site for two days and then had the site visit and have some assessment made about the area and it says right here that wetland located on the review area was found to be a poor biological quality. Would you comment on that?

Ms. Levin: Yes, as I explained before, it's a severely disturbed site. The native species that were found there are very common that comes up in degraded sites both along wetlands and in other areas and they're very ephemeral, they don't last very long because water does not pond there and stay there for any duration unless there's an extreme event. In that case, it ponds everywhere in Kahului. But the vegetation as it is right now doesn't support birds and bird habitat and it's primarily invasive species.

Mr. Tagorda: And some diggings on the site was done up to 15 inches deep and you folks found out something like clays, sandy soil in different areas and will this findings or assessment will be associated with construction of the project because it says right here that it's so saturated that water don't even go down.

Ms. Levin: That's a question I think for the engineer.

Mr. Tagorda: The clay there was found moist and both the transitional clay and sand and lower saturated within the upper 12 inches. Can you comment on that? It's always moist in that area when you did all this pit digging.

Ms. Levin: To a certain degree. We've had a lot of drought cycles and so the water table drops quite a bit but I think the question you're asking is maybe an engineering question in terms of the structure of how the building will work with that soil. I'm not quite –

Mr. Tagorda: Yeah, I just want to find out whether this area is going to be moist and wet all year round. So it's going to be a part of Kanaha Pond.

Ms. Levin: My understanding is that there is actually going to be – there's going to be a separation between the building foundation and that they're ...(inaudible)... that will kind of set the building above that.

Mr. Bob McDaniel: Let me try to help with that. Bob McDaniel, lead development partner. Construction discussions at this point do call for fill and there will be an excavation of some of the soils that have been dredged and deposited on the property now and new engineered fill placed at the property to raise it to a technical elevation of 7.6 feet and that's about a foot higher than Hana Highway is now and that will assist us in the creation of the retention ponds for the runoff later and the support structure and the foundation for the first floor and the entire facility will extend through the new engineered fill down to the bedrock because the clay and the Jaucus Sand that is in that area and you know it supports Midway Center and it supports Shell Oil, it's everything between

Kanaha Pond and the harbor, it's Jaucus Sand and it's clay and it was dredged material and this sort of facility will have to be stabilized with caissons or pilings or something of that sort and the engineered fill will be on top between the ground floor and the water table.

The wetland was determined by the Army Corp of Engineers at a four-foot elevation. What they determined was everything below a four-foot elevation on the property is a degraded wetland. So for topographic purposes everything in the shaded area is below a four-foot elevation but not wet it doesn't hold water, there's no ponding water. The table in the report you have says that at various locations within the property and within the wetland the water table is 12 inches below the surface, 18 inches below the surface because it undulates between six and three and a half feet.

Mr. Tagorda: Sir you mentioned about grubbing, filling on the ...(inaudible)... side property and you mentioned too that it will higher than the roadway, the highway.

Mr. McDaniel: Correct.

Mr. Tagorda: Now at present Hana Highway is higher than the property.

Mr. McDaniel: That's correct.

Mr. Tagorda: So where will this runoff from Hana Highway will go, the neighboring properties.

Mr. McDaniel: The Army Corp of Engineers had a concern about the Hana Highway runoff, the DOT has a concern about the highway runoff and our construction of sidewalks, drains, gutters will lead it into the front retention pond. The 640 feet that fronts Hana Highway of our property we will be responsible for the engineering after the crown of the west bound traffic on Hana Highway the runoff that goes in our direction is our responsibility.

Mr. Tagorda: Okay, I get with me something I don't – I really don't understand much maybe you can help me out here. I have this picture on Appendix B it says jurisdictional determination letter from Department of U.S. Army Corp of Engineers and it says, wetland delineation for Kahana Industrial Subdivision. You get this picture there. It's something like that but this has numbers on it and some kind of ...(inaudible)... It's two to one, three feet to three inches all that, the lower slope of the highway and on the next page, I think it talks about the same plat but it's obscure I can't understand anything.

Mr. Mardfin: Is in the final EA you'd want them to have a clearer picture or clearer explanation of that.

Mr. McDaniel: This diagram that you first referenced was created by Bob Hobdy when he did the flora and fauna study and these numbers 1, 2, 3, 4, 22 represent test holes that he dug and in his flora and fauna botanical study of the property he was checking saturation rates, levels of water that sort of thing and then the following diagram was utilized by numerous people, the Army Corp of Engineers it's a topographical survey that's shrunk down to an 8 ½ by 11 which makes it difficult to read but that shows some of the borings that were drawn, that were drilled and these borings were drilled at 90-foot depths to determine what sort of soil is down there. So it was utilized by

more than one person. So there's numerous peoples' data and drawings on there.

Mr. Tagorda: So can I request additional information in a very vivid detail how this you know, things. In relation to the wetland and the construction project.

Mr. McDaniel: Yes you may.

Mr. Tagorda: Thank you sir.

Mr. McDaniel: The geotech company took 10 borings and they were plotted throughout the site and I will provide you with as much detail as I can on those borings.

Mr. Mardfin: I think in addition to that some sort of geological statements of maps showing, you talked about bedrock and we should know what the depths of those are and that could be mapped out.

Mr. McDaniel: Certainly.

Mr. Mardfin: I had – does anybody else have a wetland question?

Mr. Wakida: – the developer – and this might be an easy question to answer. This is zoned M-2 I believe, right and it's six stories.

Mr. McDaniel: That's correct.

Ms. Wakida: Is there a foot limit on the elevator shaft, cooling tower will be extra things that go on top the building?

Mr. McDaniel: There is not that I'm aware of. Those ancillary structures on top of the building I don't know.

Ms. Wakida: And I have one more question. A couple of places in this draft are some comments about how the development should be placed on the property to have the least amount of impact on Kanaha Pond and for example the biological resource survey suggested the buildings be placed with their backs to the drainage canal so that human use is concentrated on the Kahului side. But it appears from the map that really the activity that happens around this building is on the side that faces the pond whereas the Hana Highway side seems to be the quiet side. Could you address how you decided to place the property the way it – I mean the development the way it is.

Mr. McDaniel: Certainly. We did go through several iterations to the point of a model, a second version of this facility and Dr. Duvall at Kanaha Pond and the agencies that you cited suggested that we move the human side of it, the offices, everything, towards the front of the – of the lot, towards Hana Highway on Lot 8 and put the parking structure in the rear and limit as much human exposure to the pond side as possible because the birds over the years have acclimated to Hana Highway, to car noise, to headlights and they are not as acclimated to human noises, walking, talking and those sort of activities may impede nesting or that sort of thing. So the building is

pushed as close to Hana Highway as possible to put the parking structure behind it and put the automobiles on the Kanaha Pond side.

Ms. Wakida: But I don't see that the Hana Highway side really generates you talk about human activity it appears to be a very static side of the building. It's just windows and the entrance is on the side and you drive around and the parking's in the back so there's really nothing going on in front.

Mr. McDaniel: Sure, and –

Ms. Wakida: So that would be the side you chose not to put on the Kanaha Pond side.

Mr. McDaniel: Well the primary entrance is on the western end of the building and that's at the entrance to the driveway and there is very limited personal human activity on the Kanaha Pond side.

Mr. Wakida: But there is the parking activity.

Mr. McDaniel: Sure. And headlights as cars go up to the six floor and descend from the six floor and the noises of motors. Those are the things that Dr. Duvall said we should emphasize on that side of the development.

Ms. Wakida: I find that ...(inaudible)...

Mr. Mardfin: Commissioner Wakida you need to use your microphone.

Ms. Wakida: Oh, apologize.

Mr. Mardfin: That's okay.

Ms. Wakida: I'm new.

Mr. Mardfin: Were there any other questions right now. We need to stop in about three minutes. We're not going to finish this so we're going to have to defer it because we have other urgent business we have to get today and this afternoon is fully booked. Commissioner Sablas.

Ms. Sablas: I had a question. Did I hear you correctly that you said you're going to raise the elevation 7.6 feet?

Mr. McDaniel: That will be the new zero. That will be the ground floor elevation.

Ms. Sablas: How tall are you?

Mr. McDaniel: Six foot, three.

Ms. Sablas: I was just imagining because I'm concerned about the massiveness of this building in

a small parcel and that raise another level of concern for me that it is going to be raised yet further.

Mr. McDaniel: Sorry to interrupt, that's not an additional 7.6 feet from the current level. That will be the new zero once we excavate the rubbish material that's there now and put new engineered fill in there. The zero for ground floor will be 7.6 feet above sea level in relation to Hana Highway that is now about 6.2.

Ms. Sablas: In your rendering when you have all of this, the rock wall here is that – and then is that part of that?

Mr. McDaniel: That all begins at the new elevation that's correct.

Mr. Mardfin: So the elevation from the current level is 76 feet plus seven feet roughly. Is that correct or did I get it wrong? The building is 76 feet.

Mr. McDaniel: Correct.

Mr. Mardfin: And you're going to raise the ground by?

Mr. McDaniel: New fill will raise the elevation of the site about three feet but it will be a level three.

Mr. Mardfin: So it's three feet plus 76.

Mr. McDaniel: Correct.

Mr. Mardfin: Commissioner Starr.

Mr. Starr: Yeah, what's the maximum height of any part of this structure and how does that compare with other tall buildings in the Kahului area, what are their heights right now both in stories and in feet?

Mr. McDaniel: The highest point of this structure is the top of the elevator shaft that is 93 feet, 1 inch.

Mr. Mardfin: Plus three feet.

Mr. McDaniel: It's my understanding the elevation is done from zero.

Mr. Mardfin: So it's plus three feet. Commissioner Hiranaga.

Mr. McDaniel: I don't know the elevation. To finish Commissioner Starr's question elevation of for say the MECO smoke stack or the abandoned plant at the harbor.

Mr. Starr: Yeah, mine was specifically about other office buildings.

Mr. McDaniel: Yeah, I don't know those. We can have those.

Mr. Mardfin: Commissioner Hiranaga.

Mr. Hiranaga: Just to tag along to Commissioner Starr's question, you may want to include the proposed Kahului Town Center which received its major SMA permit approval that's proposed on the current Kahului Shopping Center site because I think that is also proposed to be six stories.

Mr. Mardfin: Commissioners we have sort of reached the end of the time that we have able to allot to this today. We clearly haven't finished. We are going to have to defer this. Can I get a motion to defer or –

Mr. Starr: August 10th.

Mr. Mardfin: There's a motion to defer to August 10th. Is there a second?

Mr. Shibuya: I'll make a motion to defer this action review to August 10th.

Ms. Sablas: Second.

Mr. Mardfin: Second by Commissioner Sablas. Are there any discussion? All in favor of deferment raise your hand. One, two, three, – it looks like it's unanimous to me maybe. Ann. Any opposed?

It was moved by Mr. Shibuya, seconded by Ms. Sablas, then

VOTED: To Defer the Matter to the August 10, 2010 Meeting for Further Discussion.
(Assenting - W. Shibuya, L. Sablas, K. Hiranaga, J. Freitas, O. Tagorda, D. Domingo, P. Wakida, W. Mardfin)
(Recused - J. Starr)

Ms. Cua: So nine in favor to defer to August 10th.

Mr. Mardfin: Thank you very much. We still have lots of questions. It's not going to be feasible to finish it today.

Mr. Roy: Thank you.

Mr. Mardfin: Thank you very much. And given that we are finished with that item, I am handing the gavel back to our esteemed Chairman.

Mr. Starr: And well done Vice-Chairman, you were thrust into the fire very rapidly and you did us a great service. Okay, our next item we do have two legal matters which we need to get through today so we're going to move right along. Deputy Cua.

Ms. Cua: The next item D is a settlement agreement. Corporation Counsel will present a settlement agreement with a recommendation for action by the commission pursuant to the Maui Planning

Commission Special Management Area Rules and the Shoreline Area Rules on property owned by Larry Dodge and Sara P. Dodge (co-trustees of the Larry D. Dodge and Sara P. Dodge 1988 Living Trust) regarding notices of violation issued for alleged Special Management Area and Shoreline Area infractions situated at 6950 Makena Road, TMK 2-1-006: 090 in Makena.

D. SETTLEMENT AGREEMENT

- 1. Corporation Counsel will present a settlement agreement with a recommendation for action by the Commission pursuant to the Maui Planning Commission's Special Management Area Rules and the Shoreline Area Rules on property owned by LARRY D. DODGE and SARA P. DODGE (Co-Trustees of the Larry D. Dodge and Sara P. Dodge 1988 Living Trust) regarding Notices of Violation issued for alleged Special Management Area and Shoreline Area infractions situated at 6950 Makena Road, TMK: 2-1-006: 090, Makena, Island of Maui.**

- * An Executive Session may be called by the Commission in order to discuss their duties, powers, and liabilities as it relates to the subject settlement agreement.**

Mr. Starr: Ms. Johnston please take it away.

Ms. Mary Blaine Johnston: Thank you. Deputy Corporation Counsel Mary Blaine Johnston appearing on behalf of the Director of the Planning Department.

Mr. Paul Mancini: Good morning, my name is Paul Mancini, I'm representing Mr. and Mrs. Dodge who are here today, Larry and Sara Dodge and we have a neighbor with us too, Sonny Vic, Sonny Tavares. Here is sitting down. So good morning.

Ms. Johnston: My understanding is because of the shortness of time to have the commission members review the settlement and possibly engage in whatever discussions you may have about the terms of the settlement that it would probably be wise to defer this matter to another calendar date.

Mr. Starr: I'm wondering whether we need to. Why don't you proceed if everyone's ready to, if it becomes problematical we could defer. Maybe we can get through it. I know the next item is something we need to do today.

Ms. Johnston: Correct.

Mr. Starr: It's time sensitive. Lets try to see if we can get through this and if it does become an issue we can deal with it then. We do have half an hour to get through the two items.

Ms. Johnston: All of you should have received in your packet a copy of the settlement agreement that has been drafted and has been signed off by everyone except the Mayor. The commission

because it involves SMA, SMA – two SMA violations the commission needs to consider it and decide whether it's going to approve the settlement agreement so that's why we're before you today. There are also two shoreline violations included which you're not necessarily need to approve.

Basically it's just the background of this matter, the Dodges purchased the property located right on the beach right next to Secret Beach in Makena in 2006 I believe, 2007. They proceeded to make improvements to the property without obtaining any permits. The improvements fell into two categories. One was the construction of a wall. It's been ...(inaudible)... styled as a seawall. They were cited for doing a seawall. It's also been called a planter box wall. They were issued in 2007, both a shoreline violation, that it's a violation and SMA violation for building within the shoreline. Those were in 2007.

In 2008, there were two other violations, notice of violations entered for work that was done on their property including reconstruction of a deck, reroofing and basically it was the main things that they did. Those were also – questionable part of the deck as repaired seems to be right in the shoreline or at least in the shoreline setback. There's a survey that's not, – surveys vary a little bit.

After much discussion about the case, its efforts to settle hearing officer Paul Horikawa was appointed. The parties agreed to do a mediation with Mr. Horikawa rather than going to a hearing and that was not successful and finally right before the hearing date that was date in December of 2009, the parties met together with – this is tracked in the settlement agreement. We met in December 8th with Mrs. Dodge, her attorney Mr. Mancini, several members from the Planning Department including the inspectors that had been involved in the citation. Chris Hart and his son who were the planning consultants to the Dodges trying to help them work through these efforts.

We reached a settlement agreement and the terms of it are set out. On page 3 of the settlement agreement for the construction of the planter box wall within the shoreline setback area we agreed to \$500 initial fine and a \$500 daily fine for a total of \$1,000. For the construction of the planter box wall within the Special Management Area which is your concern a \$10,000 initial fine and \$49,000 daily fine for a total of \$59,000. So the total settlement amount for the construction of that wall is \$60,000 between the shoreline and the SMA violations. Then for the construction of the deck, reconstruction of the deck within the shoreline setback area we have agreed to \$2,000 initial fine and \$1,000 daily fine for a total of \$3,000 and for the SMA violation also associated with those repairs \$1,000 initial fine and \$1,000 daily fine. So the fine for doing the work on the deck is a total of \$5,000 so the total amount of the settlement is \$65,000.

Under the agreement as soon as the settlement agreement, assuming that the commission approves it, as soon as it's signed by the Mayor the Dodges must proceed immediately to remove the planter box wall. They have already applied and received I believe the demolition permit.

They were also cited by the State of Hawaii on this and were fined. They have appealed that ...(inaudible)... and the County sometimes, they have agreed to withdraw their appeal and settle that matter.

They're also required to proceed with getting whatever necessary building permits and so forth they

need to go forward with their work that they're doing on the deck and on the reroofing and the other matters. So they still have to comply with all the county requirements on that.

That's basically the gist of it. I have some photos. I don't know, I don't think you guys have seen any photos. If you want to see any photos of either the wall or the deck and so forth I can provide those to you. I don't know if Mr. Mancini wants to add anything.

Mr. Starr: Yeah, let's give Mr. Mancini a chance to answer some questions. Mr. Mancini.

Mr. Paul Mancini: Good morning. I'll try to be brief. This is a case that's maybe a little more complicated than my first ...(inaudible)... might be. The Dodges did purchase the property in 2007. It was a property that their father had used, Mrs. Dodge's father had used and had been a visitor to and always fell in love with the property and the family fell in love with the property and wanted it to be their home. I'm here to ask you to approve the settlement agreement which might seem a bit harsh but it's been a rather ...(inaudible)... nightmare for the Dodges which you might, might or might not appreciate. When you buy a piece of property you hope it's – everything's okay but when the Dodges got this property they inherited an ocean of problems which were not theirs. Ocean of problems they inherited were also problems that came up later after they purchased it and then they had two jurisdictions coming at them. We have some dispute as to facts but there was a planter box Mrs. Dodge wanted to continue planting there, the planter box was found by the State to be improper, by the County to be improper and there are two jurisdictions fighting over it. We had to deal with the State, the State said that the property was on conservation property and we needed a conservation district permit. The County felt that the property was within the shoreline setback and it needed a shoreline setback variance. We wish to get permits for each of those but we get caught in the catch 22. You can't get a permit unless you get a certified shoreline, you can't get a certified shoreline unless you remove all the violations. So you can't move forward. That's why it's a bit more complicated than first meets the eye.

In addition, the property had serious problems with the roof and the windows and storm came about and permits were applied for that and the problem is there's somewhat of a draconian policy that if you get a violation outstanding a permit can't be issued while that's going on. So the property is somewhat unliveable for a period of time. Not to belabor all these points, I'm just trying to make the point that it's a rather complicated scenario with cross jurisdictions. We spent a significant period of time with DLNR and they felt that the property, the planter box was on conservation property. The County felt a piece of it was on shoreline setback. There is a statute that said if a piece of it is in shoreline setback you've got jurisdiction over it, but we could never basically get a shoreline certified because there was a violation. That led to the long story of where we are now.

It gets even a bit more complicated with regard to the deck. The deck existed. They were told they could repair the deck by contractors because it was there but as you probably know the new rules require even if you want to repair within the shoreline setback area you gotta go to the director to get approval under the new rules and maybe people don't know that. So have that ocean of problems and as I said it's been a significant nightmare and ...(inaudible)... we would like it over after all of this. We've dealt with the state. They've got the demolition permit to remove the walls. They've applied for the after the fact permits for the deck. They feel that they've complied each time they're asked to file an assessment they have. In 2008 they filed for an assessment for basically the deck

with a check of \$5,000 for an after the fact permit and it's been held since. So I don't want to belabor the point but I just wanted to get you a feeling that it's been difficult. Ms. Johnston here has been helpful as other people have been to resolve the rather conflict and difficult problem.

Mr. Starr: Okay, thank you Mr. Mancini. First Commissioner Hiranaga then Commissioner Freitas. Lets try to either do it fast or we'll have to defer. Commissioner Hiranaga.

Mr. Hiranaga: Should we have been provided a copy of the settlement agreement because I do not have one.

Mr. Starr: Yeah Ms. Johnston.

Ms. Johnston: I assumed it would have gone out with this, the department's has had a copy of it for months. We can certainly make copies yeah.

Mr. Starr: Yeah Mr. Mancini.

Mr. Mancini: Can I suggest it might be deferred. I just get a little of a substantive problem if you don't have it and haven't reviewed it, you're going to act it. It's just not proper. So I'd go back to our – defer the matter until you can get and I'll try to brief the next time.

Mr. Starr: Do you want to give us a day or should we defer to the call of the Chair?

Mr. Mancini: I think we would prefer not to follow your EA on the somewhat challenging morning that you've had but what I think would like to do is check with Ann and Clayton and get on the agenda when our schedules make it sometime after – I'm hoping it's the next meeting after the August 11th but we'll work it out with Ann.

Mr. Starr: And we'll put you on an agenda at a time certain. You know like immediately after lunch or at the beginning so you don't just sit. Okay. Members motion to defer to the call of the Chair.

Mr. Freitas: So move.

Mr. Mardfin: Second.

Mr. Starr: Okay, all in favor of deferring to the call of the Chair please raise your hand. Any opposed?

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

**VOTED: To Defer the Matter to the Call of the Chair as to When It is Scheduled.
(Assenting - J. Freitas, W. Mardfin, K. Hiranaga, O. Tagorda,
D. Domingo, W. Shibuya, L. Sablas, P. Wakida)**

Ms. Cua: All in favor. Nine yes.

Mr. Starr: And I apologize that we were not able to ...(inaudible)... sat all morning.

Mr. Mancini: Thank you for your time. Have a nice afternoon.

Mr. Starr: Thank you. Okay moving right along.

Ms. Cua: The Item E Adoption of Decision and Order. The commission may take action to approve the written order upholding the Planning Director's Decision regarding Mr. Stice to obtain a Special Management Area Permit per vote taken at the June 8, 2010 meeting on the following appeal:

Mr. Gary Stice of Hana Beachfront Associates appealing the Planning Department's decision to require a Special Management Area Use Permit for the construction of proposed residential structures at 175 Haneoo Road, Koki Beach, Hana, Island of Maui. And I guess Mimi you're going to take us through this? Thank you.

E. ADOPTION OF DECISION AND ORDER

The Commission may take action to approve the written order upholding the Planning Director's Decision requiring Mr. Stice to obtain a Special Management Area Use Permit per vote taken at the June 8, 2010 meeting on the following appeal:

MR. GARY STICE of HANA BEACHFRONT ASSOCIATES appealing the Planning Department's decision to require a Special Management Area Use Permit for the construction of proposed residential structures at 175 Haneoo Road, Koki Beach, Hana, Island of Maui. (APPL 2009/0004) (T. Kapuaala) (Contested case site inspection conducted on May 4, 2010).

Ms. Mary Blaine Johnston: Yes. Deputy Corporation Counsel Mary Blaine Johnston appearing on behalf of the department. First let me ask you do you have a copy of the proposed findings.

Mr. Starr: And I want to ask you a question, the findings of fact, conclusion of law that we have has that been reviewed both and by the – is it appellant or appellee?

Ms. Johnston: Yes. Well, I don't know. I don't know. All I can say is that when I did them, I emailed a copy to Mr. Stice and put a note on the email that if he wanted to put any comments in writing he could do so and get it to you. I have heard nothing from him or Mr. Tanaka. And I would assume that the department had also sent a copy of the proposal to him.

Mr. Starr: Okay, and Mr. Giroux have you reviewed that or your department, your section of the department?

Mr. Giroux: Yes, I did have a chance to look it over and discuss some of the issues with –

Mr. Starr: Okay, the fact that we haven't heard anything back from Mr. Stice or his people does that – should be concerned about that?

Mr. Giroux: As long as they were given an opportunity to respond I think that should be sufficient.

Mr. Starr: Okay, Commissioner Mardfin or should we have Mimi give us an explanation.

Mr. Mardfin: I was just going to make one quick mention and if I can do that, in five different places it refers to mauka Haneoo Road and there is no mauka Haneoo Road and I can point out the five areas, five places where that exists but I'll wait till after you've made your presentation.

Ms. Johnston: Well I don't – my presentation is – this has been proposed, I found a couple of sort of typo things in it too in reviewing it and also a suggestion for some language, it probably should be included and so I was just going to include all of that. This was – I didn't get the transcript at a very timely fashion so I had to prepare these in a very short time line because under your rules you have to – the decision has to be rendered 60 days from the closing argument and that's August 5th so it had to be this meeting or we're all going to be in trouble on it. So I can go through – if there are any other suggestions and I can go through and immediately after this meeting revise it and get it back so that the Chair can sign off on it.

Mr. Starr: I just want to ask Mr. Giroux again about the propriety of us approving it but understanding that there'll be some minor insubstantive changes you know regarding the road name and other technical things like that whether if that's a proper course of action.

Mr. Giroux: Yeah, that would be fine as long as there's agreement for a motion on the change and then as far as the drafting and signing we'll leave up to Mimi and the Chair.

Ms. Johnston: I can go through and note for you the – they're sort of minor but – and also before I do that a copy of this was also mailed to Hana Beachfront Associates in addition emailed on the day I finished it so he should have received at least two copies.

Okay, where I would suggest if you want to look at the beginning on the first page, I don't know where the mauka Haneoo Road – must have taken from something I was looking at because –

Mr. Mardfin: That was in earlier version and during the hearing I pointed out that there is no mauka Haneoo.

Ms. Johnston: Okay, okay.

Mr. Mardfin: And you want me to point out the five places that exist?

Ms. Johnston: Okay, well let me go through and –there's one on, catch me if I'm wrong, there's one on page 1 and also on page 1 punctuation that needs to be a comma where it says the sentence that starts two-thirds the way, "the Deputy Corporation Counsel Mary Blaine" excuse me –

Mr. Mardfin: May I ask are we on the Findings of – the Proposed Findings of Fact, the two page document?

Ms. Johnston: No, no, go past that because –

Mr. Mardfin: Are we in Exhibit A?

Ms. Johnston: We're on Exhibit A because this will be the actual document that will be signed.

Mr. Mardfin: Okay. So Exhibit A there's a mauka in the square to the upper left and on the third line and also on page 8. On page 8 it is two inches down in section 5.

Ms. Johnston: I see it where it says, "proposed project located at," okay right.

Mr. Mardfin: Yeah.

Ms. Johnston: Okay, going back to page 1 on the line that says, the second paragraph says, "director of Atlantic Development, Inc., HBA's General Partner," needs to be a comma after partner.

On page 3, that paragraph 5, the spacing, I'm going to respace it so the spacing is off for some reason so it goes margin to margin like the other.

Mr. Mardfin: I'm sorry, what page was that please?

Ms. Johnston: 3, page 3, paragraph 5 you see the spacing is off. It's indented, it should be. So I'm going to change it so it has the same margins as the rest of the page but will change the way the document looks.

Mr. Mardfin: Okay.

Ms. Johnston: Then on page 8, I propose that we insert just for clarity sake so that we're tracking the rule correctly where the bold where it says, "it is hereby ordered as follows:" and it should read, "it is here by the final decision and order the Maui Planning Commission that the decision," and I'm going to insert, "the decision of the director is affirmed and that appellant Hana Beachfront Associates LLC appeal of the decision is denied."

Mr. Mardfin: Could you read that again slowly please?

Ms. Johnston: It is hereby the final decision and order of the Maui Planning Commission that the decision, I'm inserting, "the decision of the director is affirmed and that appellant Hana Beachfront Associates LLC appeal of the decision of the planning director set out in his December 2, 2008 letter is denied." And those are the – and then there will not be a certificate of service. The document presented will be just what's in Exhibit A for signature. And if anybody else sees any other changes that should be made.

Mr. Mardfin: And these first two pages that were there is – we don't need or that's not going to go forward?

Ms. Johnston: No, that's just my transmittal of the proposed findings. You see the first page says

proposed findings, Exhibit A says, Findings of Fact, Conclusions of Law. Sometimes the departments I know like the Department of Water Supply retypes, whatever we propose they actually retype in their machine but this is done so I can run this off very quickly. And If I see any other maukas we haven't seen I'll delete them.

Mr. Mardfin: Do you need a motion to adopt the written decision and order with the modifications as described?

Ms. Johnston: Yes it should be a Findings of Fact, Conclusions of Law and Decision and Order, yes the whole document.

Mr. Mardfin: I move the adoption of the Findings of Fact, Conclusions of Law and Decision and Order as written with the modifications as discussed.

Mr. Shibuya: Second.

Mr. Starr: We have a motion on the floor by Commissioner Mardfin, seconded by Commissioner Shibuya. The motion is.

Ms. Cua: To approve the written order upholding the Planning Director's Decision.

Mr. Starr: I just want to comment that Commissioner Mardfin has become probably the authority on roads and bridges in Hana District now, literally he's been working for the Hana Cultural Center doing a very deep analysis of every bridge, stream and road name so we're lucky to have that.

Ms. Johnston: Let me point one thing out, this is the kind of thing it drives attorneys crazy. I know where I got the mauka from it's in the caption, up here where it says mauka which I did not do the caption that was done by the department so I probably will leave the caption just the way it is with the mauka in there because that's not – unless you guys want me to delete it there but that's why the mauka is there.

Mr. Starr: Or you could put parentheses on it.

Ms. Johnston: Okay.

Mr. Starr: Okay, we have a motion. All in favor please raise your hand. All opposed?

It was moved by Mr. Mardfin, seconded by Mr. Shibuya, then

**VOTED: To Adopt the Findings of Fact and Decision and Order as Written with the Modifications as Discussed.
(Assenting - W. Mardfin, W. Shibuya, K. Hiranaga, J. Freitas, O. Tagorda, D. Domingo, L. Sablas, J. Wakida)**

Ms. Cua: Chair you voted?

Mr. Starr: No, I only voting if it's needed to break a tie.

Ms. Cua: Okay, eight in favor.

Ms. Johnston: I will have this back to you Chairman Starr right after lunch.

Mr. Starr: Okay, thank you very much. Next item.

Ms. Cua: Next item is acceptance of the Action Minutes of the July 13, 2010 meeting and Regular Minutes of the May 4, 2010 meeting.

F. ACCEPTANCE OF THE ACTION MINUTES OF THE JULY 13, 2010 MEETING AND REGULAR MINUTES OF THE MAY 4, 2010 MEETING.

Mr. Starr: Corrections, comments or a motion. Commissioner Shibuya.

Mr. Shibuya: I'll move to accept these minutes of July 13th and for May 4th.

Mr. Mardfin: Second.

Mr. Starr: Motion by Commissioner Shibuya, seconded by Commissioner Mardfin. Motion is.

Ms. Cua: To accept the Action Minutes of the July 13th meeting and the Regular Minutes of the May 4th meeting.

Mr. Starr: Okay, all in favor please raise your hand. All opposed.

It was moved by Mr. Shibuya, seconded by Mr. Mardfin, then

**VOTED: To Accept the Action Minutes of the July 13, 2010 Meeting and Regular Minutes of the May 4, 2010 Meeting.
(Assenting - W. Shibuya, W. Mardfin, J. Freitas, O. Tagorda, D. Domingo,
L. Sablas, P. Wakida)
(Excused - K. Hiranaga)**

Ms. Cua: Seven in favor.

Mr. Starr: Okay, thank you. Next Director's Report.

G. DIRECTOR'S REPORT

- 1. Planning Commission Projects/Issues**
- 2. Discussion of Future Maui Planning Commission Agendas**

a. August 10, 2010 meeting agenda items

Ms. Cua: Yes, we sent a letter to you dated July 26th indicating the items on your upcoming August 10th agenda. You can see that is a quite full agenda plus we've also deferred the environmental assessment matter that you are reviewing today. So it is going to be a relatively full agenda on that day. I won't go through it because you all have it.

Mr. Starr: And let me comment we had planned to do a little workshop on the permitting and entitlement process and invite people to come and give their comments on that. We're going to have to put that off because of time constraints. That will probably be the first meeting in September and it's probably a good thing to have more time to organize that and get the word out. Everyone good? Okay. Yeah, Commissioner Wakida.

Ms. Wakida: We received also at our last meeting or an earlier time a memo I guess from you with a preliminary agenda and it had another item on here the RDOB Limited Partnership, am I misinterpreting this?

Ms. Cua: Let me see that.

Ms. Wakida: So I was just wondering if that had been taken off the agenda or?

Ms. Cua: I can check on that. I'm not sure. I can check on that. Oh, no it is. I'm sorry. It's looks like it's just been – oh no, no, it's about the same. The difference is that the square footage of the property and the zoning has been, the zoning of the property has been added to the description but it is actually on the July 26th memo that I was speaking to you on. It is Item no. 1 under Communications. It's the same item.

Ms. Wakida: Okay, thank you.

Mr. Starr: With agendas if any commissioners have ideas for programs or any projects or any information studies that they would like in the future they should think about it or talk to me or talk to Ms. Cua and we can look at ahead to do that. So anything we want to do. Go ahead we have – more?

Ms. Cua: I have more.

Mr. Starr: Oh, okay.

- 3. EA/EIS Report**
- 4. SMA Minor Permit Report**
- 5. SMA Exemptions Report**

Ms. Cua: Another item that we gave you dated July 26th memo regarding questions that you brought up at your last meeting on July 13th on some of the permits that's listed on your sheets that you

receive from the department on SMA Assessments and Minor permits and Exemptions. So this is the response to the questions that arose at that meeting.

Mr. Starr: So with the receipt of the answers we're right now in the position where we've held up the acceptance of that report. I'd like to know if anyone still has concerns or whether we're ready to allow those approval – those – what are they, exemptions to be deemed as approved by the commission.

Mr. Mardfin: Mr. Chair, I'm not sure it's approved by the commission. It's the department that's doing, we're just declining to intervene. So we're not approving it exactly. We're declining to intervene.

Mr. Starr: Accepting would have been a better term. Yeah, what happens just to explain it again is that if a exemption or a minor is being issued then we get notice in these sheets and we have – I believe there's 10 days or so where we can intervene or we can step in and if we don't then they become exempted or minors. And in this case we had asked for information that stopped, that lengthened that 10-day period. Kind of stopped the process. And so with having received this other information it's kind of fair for us to either say we accept that or we have a problem with any specific. Commissioner Hiranaga.

Mr. Hiranaga: I guess I would prefer the word or the question to be is there any further objection to the director's decision.

Mr. Mardfin: I second the motion.

Mr. Hiranaga: I don't think we're taking an affirmative action.

Mr. Starr: Yeah.

Mr. Hiranaga: We're just saying we have no objection.

Mr. Starr: That's well stated and is that a motion that we have no further or maybe we don't need a motion but by absence of that.

Mr. Hiranaga: Could be a question from the Chair.

Mr. Starr: Okay, does anyone have any further questions or wish to take action on those items listed in that list? Commissioner Shibuya.

Mr. Shibuya: I just have one on page 2.

Mr. Starr: No, that's not for the current one. This is for the one from the previous meeting.

Mr. Shibuya: The last one no.

Mr. Starr: Okay, good so we'll follow that process in the future and thank you for giving us the

information that we requested.

Ms. Cua: You're welcome. And the last matter would be the report of the day on those minor permits and exemption lists that we provide you at every meeting and also the list of open assignments which are still being worked on by the department.

Mr. Starr: Yeah, I had a question on one of the ones on the exempt projects. On page 1 of 1, yeah that's the only page of exemptions, the main dwelling garage one. Actually Ms. Cua said she would find out over lunch more information about it. For me if I can save them from having to write a whole – the department from having to write a report I would prefer to do it. And you know I question simply because I don't know here it is or what it is or anything about it. If it's okay, I thought we would leave this till after lunch and if there's any others we could get a quick answer on we could save them going through that process. Members?

Mr. Shibuya: Mine is very simple I think it's on page 2 of 8 A & B Properties, Kahului house demolition, 2008/0293. I'm just curious.

Mr. Starr: Why don't see if we can get info and if we can we can deal with it after lunch and if not, we can put them off to another meeting. Commissioner Freitas.

Mr. Freitas: That has been on the list for two years maybe. It's been on for along time.

Mr. Starr: Well, still we can find out what it is. Members, any additional? Commissioner Mardfin.

Mr. Mardfin: On the approved exempt, page 1 of 1, number 207 is the Maui County Department of Parks and Rec. I guess I give the government a little extra scrutiny. Just want to know what it is.

Mr. Starr: Okay with that in mind we are going to go to recess to a couple of minutes after 1:00 p.m. Good work everyone.

A recess was called at 12:08 p.m., and the meeting was reconvened at 1:05 p.m.

Mr. Starr: Good afternoon everyone. Thank you for all being here. This is the afternoon session of the Maui Planning Commission, July 27, 2010. This is a really special session we have this afternoon. I can't tell how proud I am to be here for two reasons. One is you know, I think we have a really, really good commission and I'm proud to be a part of it and serve as Chair because we have a lot of expertise but we have people who really ask the right questions and I know we all try with all our heart to do the best we can.

The charter responsibilities of this commission are frankly quite a bit wider than we usually utilize and in a few minutes we're going to hear a little about what we're really tasked to do. We do get to write our own rules. We do get to do a lot of things that we don't or have not in the past undertaken to deal with. This is an opportunity for us to look at that, to look at the regulatory framework regarding the shoreline and we are the responsible party as far as shoreline on Maui Island. The buck stops here, there's no other body, the County Council or the Mayor is not responsible for preserving the shoreline, for preserving the health of our near shore waters and the

County Charter says it and we get to make the rules under which we do it and so we can't really blame anyone else when the shoreline degrades. It's us. We are, you know, responsible for that and I know we're the kind of people who take this responsibility seriously and want to do look at what we can do to try to do our job as best we can.

We have a great program today, our shoreline planner Jim Buika really put together a wonderful program. We have some of the best minds in the State of Hawaii with us today to help us understand the issues and I'm going to turn it over to Mr. Buika. I really want to thank the department, Ann and Kathleen and also the administration for encouraging us to do this and I'm proud to be here today. Mr. Buika, thank you for putting this together.

Mr. Jim Buika: Thank you very much Jonathan and also visa versa I'd like to on behalf of Kathleen Aoki our Director and Ann Cua our Deputy Director thank yourself as Chair and all the commissioners for taking your valuable time to allow us to bring together this field of experts and to begin a dialogue on looking at our SMA Rules and to further protect, develop and conserve our shoreline and our coastline.

So I have a presentation just set the ground rules for today and where we're going and I think everyone has an agenda. If anyone in the audience would like an agenda there are some sitting on this table over here. There's also additional information available up here also.

I'd like to introduce our, on the first slide here on the bottom it has Jeffrey, this is our CZM planning team and the Planning Department Jeffrey Dack. Raised his hand. He's our planning supervisor. Myself Jim Buika, I'm the lead Coastal Resource Planner for CZM, Ann Benasovska is a Planner 3, she's sitting at the staff table here. And also through support from County funds and the Sea Grant Program is Tara Miller but I think all the commissioners have met, over in the corner there.

So the purpose of today's session. So by far and above the main reason for this session today may be 75% is to educate the commissioners and the audience regarding what are impacts to coastal resources and also looking at a subset of mitigation tools that are available to us and the commission to minimize impacts to the coast. We would like to lay groundwork and discuss approaches for further protecting our coastal resources from these known impacts. We'll see how far we can get today. And also we would like to begin an exploration for strengthening our SMA Rules. It's not often that we have modified the rules. So this is the very beginning discussion of that and also the shoreline rules. And finally very importantly is to begin a collaboration with the University of Hawaii both those the Richardson School of Law and the Sea Grant Program to review our SMA Rules. So we will have – we have the scientific and legal technical expertise from U of H as well as other scientific additional experts and our own Corporation Counsel to guide us in this incipient task ahead of us here.

So before I even go into what I have a strawman goal and outcome for – strawman goal and objectives for the session I'd like to put up here what I envision as the outcome of today's session and this is on the agenda this number one, "to get a consensus from the Maui Planning Commission for the County of Maui Planning Department to proceed with a project aimed at modifying Special Management Area Rules and Regulations to further protect, develop and conserve coastal resources. And talking with some of the commissioners obviously we can't do

everything so we, number two, we will agree that the project will be defined and limited in scope and time and at the end for an hour from 4:00 to 5:00 hopefully we can discuss and agree to some next steps out of this session.

So this is a goal that I put together, "improve Maui County Special Management Area Rules and Regulations both to further protect, develop and conserve our coastal resources for future generations and do it within a framework of climate change and climate adaptation strategies relative to the Hawaiian Islands."

I have four objectives: The first is to understand and define potential future impact from climate change the Maui County through collaboration with State and University experts. We'll begin that today via our presentations. The plan to minimize impacts from climate change through adaptation strategies. Define priority adaptation strategies through a process that we're beginning here today, reinforced eventually through policies from the County side and then to implement some of these adaptive strategies really at the prescriptive rule – through prescriptive rule changes and code changes. You know, I think everyone in this audience is interested in the shoreline, coastal hazards, coastal resources, but a lot of the people do the permits, allow development don't know all of this. So the more we can get into the code, the more we can get into our rules for people to follow I think is really where the rubber meets the road and so it's great having the university folks here to collaborate where the county, local and state level.

So these are just some of the opportunities we have before us, strong network of science and legal experts via the following programs and offices are University of Hawaii Sea Grant Program run by Darren Okamoto, University of Hawaii School of Ocean and Earth Science and Technology, dean is Brian Taylor and Chip Fletcher is representing the school today. Hawaii Department of Land and Natural Resources, Division of Aquatic Resources, Maui County, we have Russell Sparks and Darla White here today. University of Hawaii, Richardson School of Law, Center for Island Climate, Adaptation and Policy, the Director Maxine Burkett who could not be here today but is represented by Zena Grecni who we'll introduce in a minute and we have our Maui County Corporation Counsel. So these are our science and legal expertise in the room and besides the science and legal experts.

We have planning and policy personnel and authorities at the state and local level that we will collaborate with. The Hawaii DBEDT, Department of Business and Economic and Development Tourism, Office of Planning, Abbey Meyer who runs the Office of Planning has ...(inaudible)... Chi Chow Lau Lee who is an SMA expert to help us on this and we've had some email trains going with him already. And then the Maui County Mayor's Office through Kuhea Paracuelles who's with us today, our environmental coordinator. The Planning Department, Public Works, Environmental Management and Parks and Recreation and others who deal with the shoreline, coastline on a daily basis. Also, the Maui Planning Commissioners. So we have access to dedicated professionals determined to make a difference at the local level in order to improve lives and protect the environment. So lets move forward.

Also, besides policy, planning expertise, scientific legal expertise, we also have funding opportunities and I just listed a few of these programs right here. Sea Grant Extension Program, the NOAA Coastal Storms Program Pacific Region, I know has some funding available. The NOAA

Pacific Risk Management Ohana that looks at storms and hazards throughout the Pacific has funds available. The FEMA Hazard Mitigation Grant Program for protecting critical infrastructure for Maui County and also there's a great momentum on moving forward with the Hawaii Ocean Resource Management Plan potential funding there to look at our marine resources. So this is just a subset of potential funding.

So the session guidelines here Chairman Jonathan Starr will moderate and make decisions to accommodate the full agenda. We want to stay flexible and discuss each topic in the spirit of the Maui Planning Commission to the extent required. However at some point, I'm sure we're going to have to cut off conversation per presentation. So we'll use, we'll capture follow up issues by using a parking lot and we'll summarize the parking lot issues at the end. Anna Benesovska at our Planning table will capture those as we move along. We will allow for public testimony. Commissioners may query experts in the audience. So depending on how you do it if we need an answer from someone who can answer it, feel free. We can have an interchange and the Planning Department will capture action items and our parking lot issues for follow up and we will complete the agenda no later than 5:00 p.m. unless there are other constraints.

So introductions just so everybody is aware of who is in the room, I don't know if you want to turn on the lights, I guess we can do it like this. Certainly Jonathan Starr, our Maui Planning Commission Chairman, I'm Jim Buika the lead CZM Planner for Maui County, James Giroux who is up front in his beautiful David Letterman tie representing the County I see and he's with County of Maui Corporation Counsel and represents the Maui Planning Commission all the time. Michael Miyamoto who is our Deputy Director for Public Works who also attends every Maui Planning Department Planning Commission meeting. Kuhea Paracuelles, Environmental Coordinator for Maui County in the back. Thank you for being here. Zena Grecni, Program Assistant Center for Island Climate Adaptation and Policy, UH Sea Grant which is a collaborative, the UH Sea Grant Program at Richardson School of Law. Jeffrey Dack who we introduced earlier, Anna Benesovska who we introduced earlier and Tara Owens. So Tara I'll ask you to come up to the podium and do the round of – a few other technical experts here. Tara is our Sea Grant Program Coordinator here at Maui County and the advantage of Tara's position is she sits in the Planning Department and she has been a tremendous assistance to all planners on many, many questions and I'm sure she's learning an awful lot that she can extend to the other Sea Grant Programs also just by having that proximity and sitting with us in our Planning Department. Tara.

Ms. Tara Owens: Good, I guess I get the pleasure of introducing my direct colleagues from UH and Sea Grant. Last time I stood before you was in April at the commission orientation and I was very pregnant at the time now I have a three-week-old son so it's a different day, but I do have several colleagues here from UH and Sea and Grant and from the various islands. Andy Bohlander just showed up in the back. He, like me, works as a Coastal Hazards Specialist for UH Sea Grant on the Big Island of Hawaii and works with the county planners there. We have Dolan Eversole behind me who sits on Oahu also a Coastal Hazards Specialist but works with the State DLNR and we have Chip Fletcher and Tiffany Anderson from UH. Everybody that I'm mentioning here today will probably be speaking, well, either will be speaking at some point or will for sure contribute to the conversation and we're lucky to have this whole group here to be able to contribute their perspectives from their counties and across the board. And then we have Zena Grecni who Jim introduced from ICAP and she's going to be giving us a little presentation on what is ICAP's role

with Sea Grant and how they might be able to help Maui County as we proceed after today. Is that whole group?

Mr. Buika: And I guess Darla too, Darla why don't you stand up, Darla White who works with Russell Sparks, and Russell. So we can proceed with the agenda unless there are any other comments?

Mr. Starr: I just want to define parking lot because this may be a new concept because we have limited time and we're dealing with the item that is our primary responsibility shoreline issues that's really why we're here more than anything else. That's what we're the final authority on. Most everything else goes – we just recommend. Shoreline stuff we are the authority. It's important that we understand it, but we're not going to understand everything today. So when we have questions that you know are going to take some time or need more work, we're going to put them in a parking lot which means that Jim and his crew will take note of them and then we'll come back and talk about them at another time. So lets make use of the parking lot so we don't, you know, waste all of our time in internal conversation when we have these great experts.

Our expert is someone who sits amongst us but he's someone that I really have come to respect over the years. You know, I've dealt with Corp. Counsels who really just want to say you're right or you're wrong, but Jim has done his best to educate even a kind of ignorant lout like me into realizing that we may realize that something is wrong or it shouldn't be allowed but it's not good enough to just say, no you can't do that or put a condition, you know, put a condition on it that has no scientific or legal basis because we get in trouble and cause money for the attorneys when we do that rather we need to create connection with our rules and maybe even change our rules to make it a rational decision when we know that something needs to be done to accomplish our charter. So I turn it over to Mr. James Giroux, our counsel par excellence.

Mr. Giroux: Thank you Chair. Hopefully you didn't oversell me there. Anyway I put together a short power point. Jim wanted me to just give a short historic background on the SMA area and the authority. So I'm just going to put together what us lawyers call a nutshell. This isn't a treatise. I left out all the footnotes and all the quotes should be fairly accurate.

So I'm just going to start off with the Maui Planning Commission and your agenda says the Charter but my thing says Special Management Area Rules and Shoreline Area Rules because that's kind of where we go. So the legal history what you have to understand is that you're dealing with a multi-layered history starting with the Federal law then winding its way down to the State law then coming down to the County Charter and then finding its way to us, the Planning Commission Rules.

So the Federal Coastal Zone Management Program, the CZMP that's kind of the law that starts it all off and it was established in 1972 by the passage of the Coastal Zone Management Act. And if you want to read the whole thing you can go to 16 USC Sections 14.51 and then when you wake up, I'll tell you that the Act established funding opportunities for the State. That developed an approval program so if you have an approval program you get money. The day to day implementation of the CZMA is handled at the State level in states that have established CZMPs that have been Federally approved.

And guess what? Hawaii Coastal Zone Management Program under the Hawaii Revised Statute Chapter 205A, the Coastal Zone Management Act, CMZA, was enacted under the Federal CZMA in 1977 to establish Hawaii's Coastal Zone Management Program. The Hawaii CZMP was Federally approved in 1978 and is the governing law in Hawaii with regard to Coastal Management. So we do have a valid program.

The Hawaii CZMP encompasses the entire state including all marine waters seaward to the extent of the State's police power and management authority. Thus the Hawaii CZMPs policies and objectives which are administered on a state level by the Office of Planning are applicable throughout the state.

The Hawaii CZMP sets forth special control on development within special management areas and we call that the SMA. The thing to remember is no development shall be allowed in any county within the special management area without obtaining a permit in accordance with HRS Chapter 205A. The Hawaii Coastal Zone Management Act delegates the authority to administer the SMA permit system and adopt procedures for issuing SMA permit to the counties.

Also, within 205A is the Shoreline Setback Law. Under the Shoreline Setback Law the Board of Land and Natural Resources, DLNR, is vested with the authority to determine the location of the shoreline through a shoreline certification process. The counties have the authority to establish shoreline setback rules and procedures for variances.

The most important document, the Maui County Charter. The Maui County Charter designates the planning commissions, Maui, Molokai and Lanai as the authority in all matters relating to the Coastal Zone Management Law and their respective areas. Therefore we have a framework with the Maui Planning Commission. You have your Rules of Practice and Procedure, 12-201, you have your Special Management Area Rules, 12-202 and you also have your Shoreline Rules, 12-203. If you go to Lanai, the planning commission there has their rules, Rules of Practice and Procedure, 12-401, Special Management Area Rule, 12-402 and their Shoreline Setback Rules, 12-403. If you go across the channel to Molokai Planning Commission, they have their rules, the Rules of Practice and Procedure, they have their Special Management Area Rules and then they skipped number and they went to the Shoreline Area Rules of 12-304. It's a mystery, we don't know why.

Administrative Rules that's what all of those are, they're Administrative Rules and all commissions adopt Administrative Rules in accordance with Hawaii Revised Statutes 91. The requirements are that you have a notice of public hearing and that you actually have the public hearing. So after that you can actually pass rules. Now these rules have to be within the scope of your authority. All agencies in Hawaii must ensure that their rules comply with the objectives and policies of the Coastal Zone Management Act and that's to be found under HRS 205A.

Special Management Area Use Permit procedures provide in relevant part that any rule adopted by the authority shall be consistent with the objectives and policies and Special Management Area Guidelines provided. So you just can't make any kind of rule you want. It's gotta be consistent. An administrative agency's rules may not enlarge, alter or restrict the provisions of the statute being administered. So in this case we have to be looking at the policies and objectives of 205A while you're constructing the rules.

And that being said, if there's any questions, I'll try to answer them.

Mr. Starr: Members? Okay, well more later but you really explained that very well James. Thank you. And we will move right along.

Mr. Mardfin: Mr. Chairman, for the parking lot, the last item about Topliss and how it affects what we – if you can't enlarge and you can't narrow then you gotta have a really clear idea of what we're allowed to do and this is for the parking lot.

Mr. Starr: You want to give us a 60-second ...(inaudible)... and then we'll have more on it later.

Mr. Giroux: Yeah, I think I've touched on this before as far as you know when you're making conditions but also, when you're making rules it's also applicable is that you're looking at the policies and objectives of 205A that means your rule has to concern those policies and objectives of 205A. If you look at 205A it's pretty broad. So you know, until you pass the ...(inaudible)... of you know, you just have to explain how that connection, how that rule is connected to those policies and objectives.

Mr. Starr: And we will put in the parking lot more about 205A and we're going to move onto our next portion. Jim why don't you introduce our next speaker and thanks for ...(inaudible)...

Mr. Buika: Sure. Russell Sparks from Department of Land and Natural Resources, Division of Aquatic Resources here on Maui, and this unfortunately is a very abbreviated presentation on the coral reefs and maybe at some point we could have some more. We've had Russell and Darla give a very nice training program for all the Planning Department earlier this year.

Mr. Russell Sparks: I'm pleased to be here, happy to speak in front of the Planning Commission and as Jim pointed out, this is a very abbreviated. I will try my darnest to keep it within schedule and my time was supposed to be from 1:20 to 1:40 so it's not my fault if we run late, it's starting late. Yeah, but usually we do this in about an hour, an hour and a half or so, give you two hours if you were to give it to me. I'm going to do it in 20 minutes, maybe 15 if I can figure out the mouse.

In terms of coral reefs Maui's reefs are fringing reefs. So the island is eroding away slowly with time and the coral reefs are right along the edge. That is a problem sometimes when we do things on land that effect the coral reefs. As the reefs continually erode over time if you were to look at the Northwestern Hawaiian Islands you would see that barrier reefs develop and at some point it becomes a coral reef atoll, the island itself shrinks completely underwater and then the coral itself is what makes the island. If we stress our reefs or kill reefs we're going to end up a seamount instead of coral reef atoll so we don't want that.

Coral reef ecology. I'm going to go through this really quickly. This would be about a semester maybe a full year of college in your 15 minutes so bear with me. You may have a lot of questions. I'm going to have leave shortly after this presentation but Darla is going to stay here for a while and she'll be more than happy to entertain questions I'm sure.

What does a healthy reef look like? Well I hope most of you can tell from this picture which part

of the reef is healthy and which is not. Unfortunately a lot of times the reefs kind of fall right in between somewhere and they may look perfectly normal but they may be quite out of bounds and in fact on the verge of complete collapse. So I'll try to give you some idea of how we should consider coral reefs. The first thing to think about is coral itself. Coral is actually an animal but it also has plant zooxanthellae, plant tissue that lives within it so it actually functions as a plant and photosynthesizes and that's how it generates most of its energy. It also assimilates calcium and creates skeletons so it's also at some level a mineral.

The coral forms these reefs and it needs to be considered with all of the other animals that live on there it's all connected. The animals play a role, the coral plays a role, different things that we can't even see are playing a very important role. And there's biology and there's physics and there's chemistry and it all is part of the system. You can't separate it out. When you do that you get into trouble.

This is a very simplistic picture showing some of the main players. On a healthy reef you're going to see a lot of coral. Okay, that should be one of the most obvious things. Framework building coral. You're going to also see that purple and pink stuff that's growing on the rocks that's called crustose coralline algae. It's a type of seaweed but it also simulates calcium and it forms structure and it kind of cements the reef together.

There will be some bantic algae or seaweed but it will be very hard to see because it's going to be in the cracks and crevices kind of out of the way where the fish are eating at it. There'll be herbivores, big herbivores like Parrot Fish scraping and grazing and keeping things in check. There'll be schools of fish that are always feeding on the seaweed as well. And then there's going to be the bigger fish like the sharks and the uluas that are feeding on that and these are going to be very obvious and quite abundant on the reef. There's going to be things you won't normally see like bacteria and viruses. Like any living system that's there and they actually do play a beneficial role. If you think about our own bodies, we have bacteria in our mouth and it plays a role in breaking and digesting everything else, but when you eat a lot of sugar it grows out of control and causes tooth decay. Same type of things happen on reefs when they start to degrade.

So this is the little textbook graphs. I won't go into this a whole lot but if you think about there's energy going into the system and then that energy is stored in biomass in certain areas. In a healthy reef system the sunlight is your primary energy generator. It's coming into the system and it's through photosynthesis stimulating the growth of crustose coralline algae even in the corals because they have those zooxanthellae, those photo synthetic cells, it's generating nutrients for the framework building corals. It's growing micro algae what the reef fish each and then the predators are eating that. So you can see most of that energy is stored in crustose ...(inaudible)... , coral reef fish and predators. Everything else is kind of small and difficult to see. This is kind of what it looks like big fish swim around, colorful fish here and there and coral on on the bottom.

When it gets degraded we usually add to the system. So anthropogenic impacts or effects from people. Usually some of the biggest impacts would be nutrients. You put fertilizer on the ground, we flush the toilet, whatever we do these things would change natural ecosystems that normally filter nutrients out and we end up with more nutrients in the system. Seaweed, for the sunlight acts on the seaweed which has all of that nutrients just like a farm when you fertilize it that seaweed

grows really quickly, it's broken down by bacteria that liberates more nutrients and you get this nasty thing called the positive reinforcing cycle where it quickly spins out of control. More nutrients keep getting broken down the seaweed, more nutrients going into the system make it worse and worse and worse and it overgrows everything else your major reef components become very insignificant in the system. Okay, and that tends to look like something like this. You no longer see the corals, you no longer see the large fish, big schools of fish and things of that sort.

One way to think about this and this is what's important to understand is that your reef can look more or less healthy, it's like the Jenga game if you guys have played Jenga before okay, you keep pulling those pieces out, stacking them on top it still looks like a tower, it may at some point get a little more unstable but it's still a tower, it still looks more or less the same as it did when you started. However, it's becoming less and less stable and then if you accidentally allow too much fishing and you pull that herbivore fish block out or there's a disease that kills off some of your sea urchins and that block's pulled out, just that one thing can cause the tower to fall or in the case in the coral reef the system to collapse and this is what we've monitored and we observed in several of our reefs around Maui. This is a very well known phenomenon all over the world. In fact, scientists in the Carribean have termed it "the slippery slope to slide" from advanced structured life forms you're kind of going back to the original life forms of the primordial sea slimy jellyfish and bacteria and algae and things like that. It's not a good process but it's one that is happening. I'm not going to talk about these things because I don't have enough time and I think from the agenda you're going to talk about some of these in more detail later anyway, but you do add additional stress on a global scale to our reefs when you look at things like sea level rise, ocean warming corals tend to bleach when the temperature gets hotter and they're no longer in that stable temperature and ocean acidification which is a really scary one that we've been coming more and more aware about where we're changing the chemistry of the ocean slightly to the point where those corals can no longer effectively assimilate the calcium they need for their skeletons and then they start lose structure and they're not able to grow as quickly and as strongly.

So lets talk about Maui's reefs. This is just a real quick comic strip to illustrate what's happening on Maui but it's also happening all over the world. Kid walks into aquarium store and he asks how do I create a realistic marine environment? The owner's response is you need agricultural runoff, coastal over development, unprocessed sewage and depleted fish species. Okay, and that's just the start of the list really, but the key point is that there's a lot of blame to go around. There's a lot of different things and oftentimes when you talk with policymakers they'll say, well what do we need to do? What's the one thing we need to do to fix this? And there is no answer to that because there's several things that we need to do to maybe make it a little better. It's like the death by a thousand cuts. While I do encourage people to think about though is what can we do? What are those low hanging fruits that we can pick now while we go get the ladder to get the more difficult fruits at the top of the tree?

So some of things we have stress in our reefs. Sedimentation is a big one. When all that dirt washes into the ocean it stays in the system. It doesn't flush very quickly. It gets resuspended every afternoon settles out on the coral, affects the ability of the coral to filter feed and to photosynthesize to support itself. Invasive algae is actually – you know, we always look at it and go oh we gotta do something about the invasive algae. It's probably much more a symptom of the problem of nutrient pollution, too much nutrients coming into the system fueling that rapid growth

of seaweed. Over fishing is exasperating the problem further especially when it removes herbivores from the system that feed on that seaweed. General overuse just a lot of people out there will have impacts on the reef or changing the ecosystem in way or another. And then with that is the physical damages that occur to our reef from a lot of people out there dropping anchors, boats grounding, you name it.

Around Maui we have several, nine long-term monitoring sites and of those nine, six of them are currently showing significant declines some of them quite substantially. I'll briefly talk about Honolua Bay which is has shown a fairly steady and significant decline. I'll talk a little bit about Kahekili this is an area where we're doing some more intensive management. We're taking steps to increase awareness, we're dealing herbivores as one immediate step to help to protect the reef. Maalaea is an example of a reef that's completely degraded, I'm talking completely off the edge. Papaula Point which is way off the end of the runoff when you take off and fly to Honolulu and look down at the shallow reefs way off shore that reef as well is experiencing fairly substantial decline. Kanahena Bay which is in Ahihi Kinau I'm going to talk about but just because you'll see it and you'll wonder that was actually a Crown of Thorns bloom that came through in 2005 ate a lot of the coral but now it seems to be coming back.

Before we go into much detail it's helpful to know what a healthy reef should look like. This is Molokini Crater about 80% of the bottom is covered with living coral. There doesn't seem to be any real change in coral cover from year to year. But if you watch this section of the reef you'll notice that the reef actually does change quite substantially. Some corals like these Cauliflower Corals are growing fairly quickly and that Montipora Coral or Rice Coral on the top is growing up and out. So even though the total percent of that reef when you look at it in a two-dimensional frame stays about 80% the structure of the reef changes quite dramatically. The coral is always growing. There's always a competition between slower growing and faster growing corals. It's always creating complex habitat. Okay, that's important to remember because we look at these some stress reefs they may look more or less like a coral reef and it looks okay but if they're not actively growing the erosional forces will start the whittle away at them and you'll lose that structural complexity. You won't have those cracks and crevices that the animals depend on as homes and it'll start to become kind of flat and barren.

Honolua Bay is an example of sedimentations effect on a reef. There's a lot of discussion about is there chemicals that are killing the reef. Is there overuse that's killing the reef? I think when we start to get into this we start to miss the real obvious things. Every few years, heavy rain, substantially altered lower watershed, roads running through drainage valleys and so forth, we get these heavy pulses of dirt. And if they coincide with periods of time when the water is calm that dirt's going to sit on the coral and it's going to have an impact. Computer's having a little heart attack here. Okay. So we basically have gone in this area in about a little over a decade from 42% coral down to 9%.

And this is one example, in 2005, 50% of the coral on our survey site disappeared on the south reef, just from one year to the next it just disappeared. We went back trying to piece that together and we found out there was a significant event of heavy rainfall in 2005, January and there was a lot of sediment went into the bay. I actually found a letter to the editor where somebody tracked that back to a upper Kapalua development where they were putting in some roads to connect the

development and they watched and they I guess even documented sheets of dirt flowing right past those best management practice silt fence and other things and working their way into the drainage canal into the bay. Coincided with a calm period in the ocean that dirt sat on the coral and added impact.

If you want this section of the reef over time you'll notice how it really doesn't change much at all. The purple stuff on the lower left, your lower left there is what's called Purple Rice Coral and it's evolved to live in really shallow high wave energy areas and as a result it does not have a very good defense against sediment. It doesn't encounter it very often. In that case, you can see that one year it completely disappeared on that south reef we lost nearly all of the Purple Rice Coral in one year. Some of the other corals like the Lobata Hair tend to have better mechanisms of dealing with sediment. They were still hanging in there.

Okay, the next major threat from land to our nearshore reefs is land-based pollution. Generally in the sense of nutrients. Okay. And this can enter, on Maui a lot of it enters through the ground so we don't we have like just an obvious stream that we can say ah ha lets monitor this stream and see what's happening. It's coming up through groundwater springs. And so, you look at this and you can kind of identify the red spots of where we have problems with seaweed, lots of seaweed out there. But if you do some elementary GIS which is about as high tech as I get here you can kind of sketch out what's going on around the island. And those red circled areas are kind of the urban dense areas where a lot of people live. So a lot of people, obviously you're going to have some nutrients entering the system and perhaps fueling that seaweed growth.

Also, on Maui we have a lot of agriculture still. So we have the nice green central valleys but where is all of that excess water and nutrients going to go? Into the ground, it's going to be percolating up into the ground in the areas where it tends to accumulate in the your wetland areas on either side of the island. So that explains some of it.

We also, and I'm not going to talk about this any more than just right now, because I promised I wouldn't because I can talk about this all day, we also have wastewater treatment plants in these areas where people live and that wastewater currently at least about three-quarters of it currently is disposed of in the ground. So when it goes down in the ground it bypasses any use of plants that could pull up some of those nutrients. It bypasses some of the natural attenuation, straight down in the ground where it ultimately comes up in the near shore waters and that also fuels this problem with seaweed and some of the other potential problems we have on our coral reefs.

So this is Kahekili Beach Park in North Kaanapali and this happens to be where we have since shown pretty clear evidence that the wastewater injection waters is percolating up on this reef here. Okay so from year to year there'll be blooms of seaweed fill in. What's noticeable and I want you to pay attention to is how the reef it still kind of looks about the same but it's not growing in fact it's slowing kind of withering away becoming more and more fraction and separated by seaweed. There is one success story right there, Cauliflower coral head that settled out. But by and large this section of the reef and most of the reef in this area is slowly starting to die away and erode away. In fact what we're starting to see are these really concerning dead zones where the reef just is starting to fall in on itself. And so these dead zones kind of look like this, when you're out there you look and the reef was used to be up about this level has just caved in in these big dead areas.

Now remember we talked about ocean acidification and how that affects coral's abilities to assimilate calcium and build skeletons. In a case like this, we have a lot of wastewater that's going down in the ground and it's percolating up in this small, fairly small area of reef. Now what that could be doing, we don't know for sure right now, but that could be changing the chemistry. It could be dropping the pH in this area so that we're seeing a localized effect ocean acidification. We also know that the nutrients in that water is fueling the algae and we also know that the herbivore stock in this area is lower than it should be and that's why we've implemented management to protect the herbivores out there but we do need to address some of these other issues as well and we certainly need to be cognizant of this as we plan future developments down the road. The effect of how we deal with our wastes and what that can do to the nearby reefs.

Maalaea Bay is an interesting study. In '72 there was a prominent researcher by the name of Bob Kenzie did some work and described this as a very striking bay with high diversity and rare coral species. In early '90's the U.S. Fish and Wildlife Service did some work out there and described big schools and fish and thriving reefs was 50 to 75% coral. Today we're looking at coral reef that's around 4% or less coral cover mostly covered by up to 70 some percent algae. And if you look at this one section of lobe coral over time you'll see clearly this idea that if the coral's not growing it's starting to die back it's also eroding and you can see it just pocketed right out went from a mound down to a little flat area with a pocket in it. Seaweed continues to fill in there.

Okay so just to kind of wrap up. It's kind of a depressing story. There are reefs around the island that are doing quite well still. Olowalu is one that seems to be doing fairly good for a reef flat area. There's other reefs on the northshore that tend to be offshore a bit. There's reefs like Molokini and some of the other ones off of Kihei that are a ways off of land that are doing quite well as well. But the ones that are struggling we need to really think about how we can improve their resilience so that they can start to thrive a little better. Things like water quality are key. Corals evolve in clean, low nutrient water. We have to try to bring that system back if they're going to do well. Herbivory and biological diversity that's more my departments reign but we do need to start the work with the county and with other agencies and with the citizens to really better manage these resources to get our ecosystem back to a healthier state and connectivity, this is something we all need to think about, a reef here may be critical in the long-term survival of the reefs say on Kahoolawe or something. So we have to better understand how these are all connected and how important each little reef may be to the overall system. And that's my crash course on coral reef ecology. Pretty much on time.

Mr. Starr: Well done. Great presentation. Thank you. Any quick questions or items for the parking lot? Commissioner Mardfin.

Mr. Mardfin: One quick one for the parking lot. Several years ago when I first got on the commission we heard things like this then we heard, I started to ask lots of questions and we had consultants come over and say, no that's not true. So there seems to be some scientific disagreements. At some point, I'd like to try to get those sort of resolved as much as possible. I know it's not possibly possible. I'm an economist, economists don't agree, I'm not expecting anybody else to either but to the extent we can get – there's common agreement about this and then there's disagreements about C, D and E that would be helpful to me.

Mr. Starr: Okay, we'll more discussion later and I hope we'll get to hear the long form because I saw Mr. Sparks give a deeper presentation, it was great a few years ago. We do need to move along, but Commissioner Shibuya.

Mr. Shibuya: Just a quick one as the focus is actually on the Maui's economic development and in terms of thriving and expanding eco-tourism the more we have this it seems like we want to share this beauty of the shoreline life and yet at the same time when we do this people trample all over and pick up the fish, the reef fish and they want to take it home and put it in their aquariums. So we have this kind of dichotomy here on what we want to preserve and at the same time for whom and how do we go about sharing this beauty with the people who do not have it in their native areas and are visiting here and they are part of a economic development.

Mr. Starr: This is a discussion we should have. We are the authority on these matters and I just want to add one thing is that coral is our sand factory unlike the mainland, unlike other places on earth all of our beach sand comes from coral and as our coral is just a small percentage of what it was and is declining we are likely to not have sand making beaches in the future and we'll be getting onto beach later but these two issues the coral and the beaches are definitely related and if we are going to have beaches long time we need, you know, many, many decades from now we're going to need coral. Jim.

Mr. Buika: Since I'm sitting at the table can I make a comment too?

Mr. Starr: Yeah, and then move us along.

Mr. Buika: Sure. Okay, well you know in our SMA Rules and in our review process we don't directly look at corals. We don't look at coral reef maps or anything like that. Is that a valid – you know, something for the parking lot, is that a valid issue to have as part of our application even on – so that we have information available to us.

Mr. Starr: Absolutely since we do rule on the causes that seem to be creating the decline maybe there's a connection that should be drawn in rules.

Mr. Buika: Okay, thank you very much Russell, excellent. Okay so we'll move onto the Rules for Design of Storm Drainage Facilities. Mike Miyamoto, Deputy Director from Public Works.

Mr. Starr: Go ahead Mike and thanks for presenting.

Mr. Buika: And we presentations here to hand out.

Mr. Mike Miyamoto: Yeah, there's handouts for everybody, you can take little note or write your questions down that you can mail in later. We're going to try and speed this along. We're going to try and make up some loss time here. As you can see we're going to just talk about the county's drainage regulations. Basically it's Title 15 in the County Code. We have a copy if anybody needs to, wants to get into the nitty gritty engineering details but I'm going to try and give you a pretty broad brush of what it is that we do.

Basically our basic philosophy is that you know as you can see it says, "drainage systems shall dispose storm runoff without damage to street facilities," obviously we don't want it eating up roadways, "structures or ground and cause no serious interruption of normal vehicular traffic and in a manner that will not adversely effect downstream and adjoining property." So as I've mentioned in the past our drainage rules do no harm to someone down below that's why we mainly look at the – we're assuming the existing is acceptable so we're looking at the incremental amount if any development, proposed development will do, we want the applicants to mitigate that amount.

In general, natural gullies, waterways, streams and tributaries shall not be replaced with flow systems except at roadway crossings. Basically if we have a natural drainage area we don't want to see it hardened because that obviously changes the characteristics of the flow and it can make it speed up, it reduces its ability to capture some of that sediment and some of the other bad things in stream water.

The system must have maximum reliability of operation with minimum maintenance requirements. Maintenance obviously is with our Highways Division. We have a big island, not many guys, you know we have a lot of responsibilities to roadways and the drainageways. So we're not always there but we try to realize when the keypoints are, obviously if we know the wet season's coming along we make it a point to get out there and clean these facilities.

In areas where existing drainage systems are inadequate the existing system shall be upgraded or a new system shall be provided when there is no adequate outlet. Additional runoff generated by the development may be retained on site in a retention basin. Generally what this is saying is if there's an existing drainage system somewhere adjacent to your property and it has the additional capacity to handle your runoff, we've allowed it to enter into the system. If the system cannot handle the increase in runoff we either have you upgrade the existing system or we have you build some kind of a system that maintains it on site. The primary example is what we have Kehalani. They did a lot of off site work. Some of you may have remembered that they did some work along Lower Main by around St. Anthony. They replaced an existing undersized pipe. They put in a very large 60-inch pipe for us to get it to Lao Stream. They also have a huge basin if you recall that captures a lot of that water. And so those are the types of elements that we look for them to design and construct.

Off site flows may be passed safely through a development provided there are no additional adverse effects resulting from a new development to adjacent and downstream properties. Basically as you've seen in some projects in South Maui a lot of the properties now have flows that are originating somewhere beyond the property boundaries and we've allowed it to pass through provided that they – any modification that they do do not affect adjacent properties. For example, I think one we had like a couple weeks ago in South Maui, you know, if you alter the channel you could be increasing the velocities of that runoff so those kinds of things we have to be aware of and monitor whether or not it will have downstream impacts.

This basically is the hydraulic criteria. This is just to give you an idea of the methods that which we do. Obviously we look at different size drainage areas a little differently. For example, you can see the first one. Drainage areas of a 100 acres or more we typically use that you mitigate the 100-year frequency storm for a 24-hour Storm. But basically what we're looking at is we're looking at a

bigger storm. If you have a large drainage area obviously it takes a long time for that water to reach the focal point. So we're looking for a longer time period that we want to make sure it's safe.

Drainage areas of a 100 acres or less, typically it's 10 years if you're just allowing it to pass. You know a one-hour storm for – but if you have like – you see in the third bullet there, you know, if you're going to be doing some kind of a – there's a sump, tail water condition, roadway culverts, you have a retention or detention basin, we kick it up. We go beyond the 10-year. We go to the 50-year, one-hour storm. So that's the criteria we really use. And generally the majority of the projects fall into the 50-year, one-hour storm as they're all trying to do some kind of retention/detention basin on their project.

So here's some additional information. The rules also specify you know depending on the size of your drainage area which method of computation to use. In the smaller areas there's a simple method called the rational method that it's simply a basic formula that there's constants and coefficients that get utilized and the larger areas there's a little bit more in-depth computer simulation type computations that occur. The result from those computations you get, you know, it specifies hydraulic design criteria, provide – the table also provides – we also have design tables and charts based on the area you're in, the type of soil, the rainfall frequency for the various frequency storms. And we also require that these drainage reports get – prepared by a licensed engineer, someone who has the engineering background that can develop these studies so we somewhat protect the integrity of these studies.

Some related information, post construction storm water quality that's something that this commission has started bringing up a lot in projects. Our responsibility was primarily about the damage that the water could do physically. We're moving into the point where now we're looking at it, what can it do chemically to the shoreline as Russell had mentioned? The County's working you know to adopt post construction type storm water quality standards for new development. Water quality shall be address through the use of detention or filtration facilities. This commission has already mandated a lot that a lot of catch basins have these filtration methods so that helps a lot. Helps to bring down the amount of sediment and from the parking lots the petroleum products that might get into the system and so we're moving in that direction. We're working with the State to come up with those guidelines. I know for example on the mainland where I lived the impact of working with the quality is these drainage basins get very large because it has to hold the water for a significant period of time. A lot of times you have vegetation in the bottom of these basins that help absorb a lot of these chemicals. So it's going to require a big change in how development gets designed in the future.

Additional related grading ordinance. The County Grading Ordinance requires best management practices to be utilized during construction to prevent damage by sedimentation to streams, water courses, natural areas and property of others. That's pretty standard for construction. Best management practices include control of onsite drainage. Obviously if you're doing some grading and taking away a lot of the vegetation and you wanted to control it, control all that sediment. You can see we also have in there dust control. It's technically not our responsibility but we make it a point that they look at – if they're going to defoliate an area we want to make sure you control the dust whether it be water trucks, sprinklers, dust fences also.

We look at also trying to limit the amount of area that has been, you know, where you – they've cleared the vegetation and we try to have them if they're going to move on from one area to the other ...(inaudible)... grading we have them revegetate the past area that they've done grading in. We do sediment erosion control staging of construction, limiting the amount of clearing you can do, silt fences, sedimentation basins, hydromulching where they can do some revegetation of graded areas.

For grading projects over one acre or when – this is basically what the grading ordinance says, “for grading projects over one acre or when cuts or fills exceeds 15 feet in height the following must be prepared by a licensed engineer in the State of Hawaii.” You need an erosion control plan, how you're going to handle control once you start grading an area. Your drainage report, what are the implications for this property when you can change the contour and the conditions of the surface? And then a soils report. We want to know are you going to be saturating the soil? Is there potential for shifting of soils. This is something that the Council is looking at also in their steep slopes development as part of the drainage rules they want to add steep slopes considerations.

More information about the grading ordinance requirements for property along shorelines. Grading of coastal dunes is prohibited. Location of dunes to be determined by the coastal scientist. Obviously we are not coastal scientists so we depend on applicants. Importation of soil prohibited into shoreline areas as determined by Department of Planning. So we work with the Planning Department regarding those aspects. All construction conditions of SMA Permits shall be included in the grading plans. So we make it a point whatever comes out of this commission for conditions we pass it onto our Development Services Administration who does the grading permit ...(inaudible)... And that's it.

Mr. Starr: Okay. Good presentation. Commissioner Mardfin.

Mr. Mardfin: Three quick ones and this could be later or maybe a quick answer now. Is the 50-year storm in the Hana the same as a 50-year storm in Kihei?

Mr. Miyamoto: No, typically you're just looking at the frequency, the amount of the – the intensity of the rainfall varies obviously throughout the island.

Mr. Mardfin: So there are different standards?

Mr. Miyamoto: Yes, we have graphics. In the guidelines we have a graphics that shows historical information about the different rain intensities for different year storms throughout the island.

Mr. Mardfin: Do we make a distinction between the kind of land it's hitting. For instance, given the same amount of water, a storm in Kahikinui will have much more runoff than a storm in Nahiku.

Mr. Miyamoto: Yes we do make as part of the computation there is a coefficient for soil types, soil conditions whether it be a clay soil, sandy soil or if it's impervious asphalt there are different coefficients for the various types of permeability of the soil.

Mr. Mardfin: Thank you. And my last one I think this will be a parking lot question. You mentioned

importation of soil, how about exportation of sand? Is that regulated at all?

Mr. Miyamoto: We have a situation where we were doing some maintenance and we did run into concerns with Planning about you know, removing sand on the roadway. So we went through the SMA process and everything.

Mr. Mardfin: I'm also thinking about exportation of sand from the island to some other –

Mr. Miyamoto: That is something that comes through this commission I would imagine not necessarily through the grading ordinance.

Mr. Starr: Parking lot.

Mr. Mardfin: Parking lot, thank you.

Mr. Starr: Okay, Commissioner Sablas.

Ms. Sablas: Something else for the parking lot and grading. You know, we've had examples of how we had runoff and that stayed in the reef and for parking lot what enforcement and penalties are in place and if we can look at that and revisit it because it does happen and sometimes nothing happens to the offenders.

Mr. Starr: Yeah, so we'll discuss that farther. I know the sand, someone just counted the truckloads being put on a barge and taken to Oahu last week for sand. And on the parking lot issue I just wanted to add something they seem to taking into account sedimentation, I'm wondering if nutrient load is also being taken into account in the new – in Title 16 etc., and Commissioner Wakida did I see you or did – Commissioner Shibuya I'm sorry.

Mr. Shibuya: Yeah, just a quick one in terms of we tend to harden the streams to protect the erosion and at the same time we increase velocity of the down flow and also endanger some of the native species such as opai, o'opu and hihiwai. Also the other aspect in terms of we have drainage systems up on upper areas and perhaps maybe we can think about in terms of regulating some of these streams and flows.

Mr. Starr: We'll discuss that at a future date. So we're going to move right along and to a slightly separate subject and I'll introduce Tara Owens, our own person who represents Maui County and Sea Grant and our beach and shoreline issues. Thank you for being here today.

Ms. Tara Owens: Thank you Mr. Chair. Thanks again Commissioners for having all of us today. Much of what I'm going to tell you today you heard before from me back in April but I think it will set the tone again for the afternoon and the flow is going to kind of be like this. I'm going to talk to you about potential impacts of climate and sea level rise to Maui and you know that's 255 of the challenge is understanding the problem. The hard part is deciding what to do about it. So my colleague Andy Bohlander, is going to follow up after me with some of the adaptation options that might be available to us and I think that will probably spark a lot of the discussion for the afternoon. After that, Chip Fletcher from UH Coastal Geology is going to follow up with methodology of the

science for the erosion and sea level rise maps that are available to us that then will be implemented into our rules and our policies. And then finally Zena is going to wrap up from the Island Climate Adaptation and Policy group with how we can use those resources to help us with any potential policy or regulatory changes in the future.

I'll start with this as a good example of the challenges that are before us. This is from Sunday's paper probably most of you saw it. The lead article is, "Sand replenishment effort runs aground," and it's not really the way I would like the message to have been conveyed but again it does sort of identify what challenges are before us and this article was about a pretty high profile beach replenishment project happening in Spreckelsville off of Stables Road on the northshore where for the first time on Maui this project was attempting to use offshore sand resources to replenish the beach and the project stopped before it accomplished what it intended to do. And there is debate you can read the article yourself on whether the project was successful or not, but it does bring up the challenges in terms of the choices that we're going to have to deal with in the future and dealing with sea level rise and continuance of chronic erosion on our beaches. You know we have choices to make. We can protect the beach and dune system, we can protect the private property behind it or we can try to do both and there are only so many options available to us when we're looking and facing the challenges. We can harden the shoreline, we can continue to try with beach renourishment and there are various ways of doing that.

It also brings up some policy hurdles that we have to deal with. This particular project was completely and State jurisdiction and you guys probably know that we have a system here where the regulation of the shoreline is bifurcated. Sometimes it's in State jurisdiction, sometimes it's County jurisdiction and sometimes it's both. That's unique to Hawaii and it really presents some challenges for the planners and regulators in terms of the efficiencies of how to handle these problems. So that's probably a point of discussion for today as well and I think Andy will be bringing some of that up in his presentation.

I sort of already introduced, you've been introduced to Sea Grant but just a quick reminder, this is a NOAA program. There are 32 Sea Grant college programs across the nation like ours that runs through the University of Hawaii. There are several different focus areas but the area that myself and my colleagues are most involved in is the hazard resilience in coastal communities.

So again, I already introduced some of my coworkers but there's a Sea Grant Agent on each of the each of the islands at this point we just recently lost our Kauai Coastal Hazard Specialist and we're soliciting for a new Coastal Hazards Extension Agent for Kauai as we speak. But we have Dolan and Chris Conger on Oahu, myself here on Maui and Andy in Hawaii. Dolan's been around in this role longer than all of us and he pretty much knows what's going on on all the islands. So if you ever have any questions you can usually go to Dolan for the answers. And our role is to bring science to planning on a lot of different issues many of those listed here.

One of the sort of new initiatives is this Center for Island Climate Adaptation and Policy Program that UH Sea Grant established in partnership with the School of Law – the School of Ocean and Earth Science and Technology, Hawaiian Studies and Social Sciences and Zena is going to tell you more about ICAP and how ICAP can be involved with Maui County. But the idea is to bring together law, policy, planning and indigenous knowledge here in Hawaii all in one place.

So that's brief introduction to us. And I'm just going to give you a quick overview of some of the climate impacts we're seeing in general and in Hawaii and how that affects potential sea level rise.

In Hawaii, these are direct observations. A lot of this is summarized in the briefing document that's sitting there and I think many of you have already received in the former meetings or maybe through the mail and it was written by Chip Fletcher but we're seeing some of these changes. Air temperature is rising in Hawaii. Rainfall and stream flow are declining. Sea level is rising. Rain intensity is increasing, sea surface temperatures are rising and the ocean's becoming more acidic and I'll talk about how some of these things relate to sea level rise and I'm going to go quickly through this since you've heard it before and we need to make up some time.

But in general we know temperatures are rising. You might be able to argue whether all or some of this is anthropogenic and I'm just going to try to stick with some of facts here today. We know temperatures are rising and we know the rise in temperature is accelerating. We've had – recently had the warmest 12 months in the past 130 years and 2009 tied as the second warmest year on record globally. We're seeing an increase in temperature of about .2 degrees Celsius per decade and we've seen an increase of .8 degrees Celsius since 1880. In Hawaii, we're seeing those same trends in the last 30 or so years temperatures increasing. There's higher acceleration at higher elevations.

This is just a little movie of how surface temperatures have been rising since the 1800's. You can see the blues. The cool colors are quickly changing into warmer colors showing the increase in temperature. When you see it like this, it looks pretty drastic.

We're also seeing a rise in tide and so we know sea level is rising what we don't know or what we're just finding out is how quickly the sea level rise might be accelerating as move into the future. But there are lots of tide gauges across the world and we have observed the sea level trend, the rise in sea level and then the acceleration in sea level. We saw about six inches per year in the 20th Century, in the 20th Century and now most recently 12 to 14 inches per 100 years and I'll talk about the predictions for the future here in a second.

At the Kahului tide gauge we see a rise in tide of about 2.32 millimeters per year which is about nine inches per 100 years. It's a little bit higher than the other islands and that may be due in part to the geology and subsidence of the land.

Sea level rise happens because of basically two different factors, thermal expansion of ocean water and increase of introduction of new water to the system from melting of ice. I recently read that I guess what would you think, does thermal expansion or melting ice contribute most to sea level rise? Thermal expansion. Okay, well, to me that was kind of intuitive because we don't see that happening. We see the melting ice. We see what's happening in Greenland and Antarctica and both contributes significantly to sea level rise but it really depends on a time scale you look at. And the – let me just read the statistic I just recently read, "even if carbon emissions are stabilized by the end of this century the 21st century, sea level rise from thermal expansion will have reached half of its eventual, only half of its eventual level by 2500." So thermal expansion yeah has a lot to contribute to sea level rise in the future.

We know, we can observe the melting ice in the past decade the annual difference of melting and snow fall on Greenland tripled. This is the ice mass in giga times in Greenland and you can see the steady decrease of the mass of ice as we observe melting. Same with Antarctica, all regions of Antarctica are warming and the overall ice loss in Antarctica increased by 75% in the last decade. Similar trend here in Antarctica 2003 to 2009 decrease in ice mass.

And so this all contributes to warming, ice melting, thermal expansion to sea level rise. Some estimates from the past in the 1800's was that we had a sea level rise of less than three inches per century and that's steadily increased again, we can observe that from the instrumental records at the tide gauges. And then we have projections for the future and estimates now are expected to be at least three feet per century if not more.

A question I sometimes get when I'm asked about sea level rise is okay, we keep talking about the next century well what's going to happen in the next decade? Because planners are interested in the next 10, 20, 30 years. There's still a lot of uncertainty in the data. We, scientists feel fairly confident like I said that we're going to see at least three feet in the next century if not something closer to six feet or two meters. But some of the uncertainty in the acceleration of the rate has to do with these factors, greenhouse gas concentrations. We know those levels of greenhouse gases are rising. But how much will depend on a lot of factors in the future, population and energy use.

Climate sensitivity so we don't know exactly how the ocean and atmosphere are going to interact and so a lot of how that happens depends on feedback from clouds, water vapor and ice and these are so – areas that are hard to model. Ocean heat exchange, the atmosphere is influenced by the ocean surface temperature and that depends on currents and heat transport and salinity. So it's something that's got to be accounted for and then we're still unsure about the rate of melting of the ice sheets in Greenland and Antarctica. So that contributes some to the uncertainty not only in the next 100, 200 years but certainly within the next couple of decades. But these are some of the most recent studies on sea level rise and the range of estimates for sea level rise over the next century. This is sea level rise in centimeters along this access and these are the various studies in the last several years. And you can see the range is anywhere from 25 centimeters up to 200 centimeters or two meters or about six feet. And so one 100 centimeters, one meter or about three feet is right about in the middle of all these ranges from these various studies. So at least one meter seems to be a reasonable planning target for planning for sea level rise.

So the question is what should we do next? Part of planning for the future is looking at the data getting good maps. Chip's going to talk a lot more about this this afternoon. He's going to talk about the mapping effort UH that is going to benefit Maui County here very shortly. But he's one example from California where they've mapped 1.4 meters of sea level rise across the state using high resolution elevation data and then they were looking at what's susceptible to sea level rise within those areas. So this is what we're working toward here in Hawaii and here on Maui. This is the next step. What's required to do this is really high resolution elevation data. We have some of that available to us and Chip and his group are working on developing that data into something that can be used to make similar maps for Hawaii, something like this, this is Oahu. So we should have similar products available for Maui within the next year and Chip will be able to tell you more about what products will be available in the time line for that.

But this is the first step in determining how we should be planning for sea level rise and how it impacts where we live, how it impacts the ecosystem, how it might impact our future policies. Some of the impacts of sea level rise coastal erosion will increase. Water table is going to rise and we're going to have aquifer contamination, new wetlands will start to form. So even areas that aren't flooded necessarily will be impacted by salt water intrusion. Storm drains will begin to back up. ... (inaudible) ... flooding that we see sometimes several times a year in low laying areas will happen more often. Drainage infrastructure in a similar way may be impacted and stop working in low laying areas. We'll have increase vulnerability to tsunami inundation and storm surge and potentially infrastructure failure in some places.

So I'm just gonna go through a few examples of some of these impacts. This is one of Chip's slides. This is the result of some wave runup studies in Waimanalo area on Oahu and so what you see here are the one-year, five-year, ten-year, twenty-five-year inundation plain and then I'm going to start this movie and you can see as sea level rise increases the areas of inundation are going to grow significantly and impact this area. And these are the types of studies that are going to help inform us as we plan for the future. Sea level is rising, these inundation plains are moving farther mauka and the beach is eroding and that's up to one meter of sea level rise.

We know the shorelines retreating. This is an example of the 1912 shoreline in Paia Bay and this today's shoreline. So we're going to continue to see shoreline retreat. The question is how are we going to respond to that. I mentioned earlier we can stabilize the land or we can try to preserve the beach or we can do a little bit of both. This is something that we should begin discussions about. How are we going to prioritize areas.

Many states in the mainland prohibit hardening of the shoreline and that's something that we don't prohibit here in Hawaii but we have a unique set of circumstances. A lot of times on the mainland they will rely on beach replenishment as the way of maintaining the beach and avoiding shoreline hardening. Well, we know that going to be a challenge for us in the future and that's because we don't have a lot of sand resources it's either inland or offshore so we're going to have to look at that, the resource issue and decide how we're going to deal with that and decide whether we still want to use shoreline hardening as an option for protecting the shoreline. This was an example I presented before, just a more recently example, this is the Kahana Sunset area on the west side. The beach in 1945 nice and wide, this is the beach in approximately 2009 and we recently had an event there where the lanai of the condos that are at this location was undermined due to essentially erosion and then undermining of the seawall and drainage problems which kind of created a sink hole and the whole lanai failed and this is a big issue. Jim, Anna and I see permits coming in through the Current Planning Department all the time for new seawalls and it's always a struggle with how to comment on the proposal for their seawalls and whether this commission and our department should provide approval. So certainly a big challenge.

Another impact of sea level rise we're going to see coral reefs degraded. You heard Russell and Darla they talk about ocean acidification that's one issue, but another issue might be that sea level rise is going to mobilize more suspended sediment and the increased wave energy will increase turbidity and that's going to impact photosynthesis which will then impact the health of the reef as well.

Drainage failure. This is a coastal road in Kihei after a heavy rainfall. Chip's going to talk about the sea level rise maps and then he's going to show you one way that UH is looking at certain water level thresholds and how many times a year especially if you have a combination of high tide and sea level rise how many times a year those thresholds will be exceeded and we'll start seeing similar situations to this like ...(inaudible)... and flooding occur more frequently throughout the year and there's ways of calculating that and providing some real planning horizons.

Critical infrastructure will be threatened. You know, one thing I always say is we should probably try to set a good example for ourselves here in the county and you know there are some situations that can't be changed but as we move into the future for example when we're – the county is implementing new drainage systems or new sewer pump, sewer main lines, things like that we should set a good example by looking at the erosion hazard, looking at the inundation hazard from sea level rise and locating our infrastructure outside of the hazard zone if at all possible.

Again, Andy's going to talk more about adaptation options in his presentation but here are just some things we should be thinking about for climate risk management specific to sea level rise, expand education that's what we're here doing today. Monitor advances and understanding. So keep up with the climate science it changes on a daily basis. This is my slide. Define the problem locally, we're getting good data for Maui we need to continue to do that. We'll talk about that more later in the day, have good data, information and tools, good models, good maps, look at what's at risk and then explore alternative strategies and Andy's really going to get more into that this afternoon. Thank you very much.

Mr. Starr: Excellent. Thank you very much Tara. We're going to take a 10-minute recess.

A recess was called at 2:33 p.m., and the meeting was reconvened at 2:42 p.m.

Mr. Starr: Okay, lets go back we have some other really, really great portions of our program left to go. Jim is missing in action but we're going to proceed. I'd like to go little bit off this, we're going to open up with Dolan Eversole and then he's going to pass it off to Andy Bohlander who's here visiting from the Big Island across the waters. So come Dolan, you lead off and take us into our next segment and thanks for being here.

Mr. Dolan Eversole: Aloha, good afternoon. Thank you Chair. My name's Dolan Eversole, I work with the University of Hawaii, Sea Grant Program, I'm a colleague of Tara Owens and much as Tara works closely with the Maui County, I am a technical advisor to the DLNR. So I work directly with Sam Lemmo in the Office of Conservation and Coastal Lands. So I serve as an advisor to the State on shoreline issues. Hadn't really prepared a presentation today, but Jonathan asked me to just present some of my observations and thoughts on kind of where we're going with some of this and I'll make this very brief. Some of this you're going to hear later on too, but there's maybe three or four main ideas that I wanted to convey to you.

Having just gotten back from a pretty big international conference on climate change, climate change adaptation. I was in Australia about two weeks ago where there was about a thousand people from all over the world talking about climate adaptation. And some of the key points that came out of that I'd like to share with you.

A couple of things were that while there's still a great amount of uncertainty with the climate change science that is no excuse not to act and we heard that consistently from scientist to scientist and I think you're going to hear that again today but that's one of my key messages is yes there's uncertainty, we're getting a better handle on what the climate impacts are going to be and we are, by the way working on a climate change impacts report for Hawaii. We're expecting that to be done probably this fall, early fall and we'll be sure to get you guys copies and it will be specific to what we're expecting to happen in Hawaii regarding rainfall, drought, sea level rise, those types of things.

So one of the messages that came out of this conference that I'd like to share with you was in regards to climate change adaptation, start small and one of the ideas that I'd like to share is we're going to probably talk about some of the SMA Rules and what we can do for climate adaptation in the future. I would suggest to you that we don't need to make a bunch of new rules. We have it within our existing rules, ordinance and statutes to implement climate adaptation right now. We're commonly and historically have referred to this effort as hazard mitigation. Coastal hazard mitigation is essentially the same thing as climate adaptation. They may be slightly different in scope but we call them different things for essentially what is the same.

So what we might call hazard mitigation is climate adaptation which is also resource conservation. So there's a lot of overlap between these different disciplines and that's one of the focus areas of what we'll hear about in a few minutes for the island climate adaptation and policy center through UH is to incorporate the multi disciplinary nature to climate adaptation, incorporating science, policy, planning and the legal aspects of actually incorporating change.

One of the other ideas that I'd like to share with you is the idea of main streaming, main streaming climate adaptation and what I mean by that is not making it an additional burden. County and State and Federal employees, planners are already overworked. We don't need another list of things we need to do but rather what we can do is apply a climate lens to the work we're already doing. So there's some relatively straightforward things that we could do, adding strategic language to the SMA Rules now that would provide more strategic climate adaptation. So rather than making a whole new set of rules we just apply a filter to what's there.

And in regards to that, there has been some efforts in the past to amend our coastal zone management chapter, 205A, State Statute. While those attempts have failed I will point out that some of those attempts to alter and amend the statute where relatively simple amendments like adding sea level rise as an identified coastal hazard. I think most people would agree that is a coastal hazard but it's currently not identified as a coastal hazard by our state statute.

So again, relatively simple amendments to our rules and statutes will go a long way. So those were kind of the main concepts I wanted to convey to you. We have a lot more to hear today from the rest of our speakers and I will be around the rest of the afternoon, I'll look forward to speaking with you and answering any further questions you have. Thank you.

Mr. Starr: Okay –

Mr. Eversole: Maybe I should introduce the next speaker would you like me to do that?

Mr. Starr: Yeah, why don't introduce.

Mr. Eversole: This is another colleague of mine, Andy Bohlander, he's also a Sea Grant Extension Agent working on the Island of Hawaii for the County of Hawaii and UH Sea Grant.

Mr. Andy Bohlander: Thank you Dolan, aloha, good afternoon everybody. I'd like to thank Dolan he made all my points for me and introduced me so I have left to say. No, I really appreciate being here today. I actually missed two flights to get here today so I'm really excited to be here.

A lot of what Dolan said is going to be echoed in my talk here today. A lot of the stuff that Tara said will come out in this as well so I apologize for some of the repetition but as the title slide implies I'm going to be talking about climate adaptation and implications for shorelines here particularly for shoreline management. So with that I'll get started and I'll try to keep it as I quick as I can here to give us some extra time for the dialogue at the end which I think is probably what's going to be most important today.

So I'll start with a brief introduction of kind of where we are with climate adaptation in Hawaii, some of the challenges and the opportunities that we have here in the islands and then we'll move into sea level rise. I realize you guys have other concerns on the island here with climate adaptation drought, preservation of coastal plains, coral reef issues, tons of other stuff but for the purposes of this I'm going to focus primarily on sea level rise and then I'll move into a brief discussion of the shoreline hardening issues, seawalls, and then some recommendations and guiding principals for you as you move forward at the County.

So where we are with climate adaptation. I'm going to start with the small diagram at the bottom and this is in mind but I believe there's four stages to this whole adaptation approach. The first one is identifying the issues really trying to understand what we're up against or what the potential impacts are and then moving to the next step in understanding what our vulnerabilities are and trying to quantify the impacts so we know what we need to do in response which brings us to the third step developing strategies and then finally implementing those strategies.

Hawaii is very much in stage one right now. Back in 1998 they came out with a climate adaptation plan which was very general in nature and never really went anywhere. More recently in 2007, we passed the Global Warming Solutions Act which placed emissions restrictions on the State and then in 2009, the Ocean Resources Management Plan published Climate Adaptation Framework for Hawaii which again provides some more general higher level guidance for moving forward with climate adaptation but it's a good first step and then the Center for Island Climate Adaptation and Policy or ICAP which Zena will talk about next is working on a report right now trying to discuss the climate drivers and the potential impacts that we're going to see here in the islands and it should be out here in the next few months so all excited to get a hold of that.

In terms of the next steps, I feel like right now we have a pretty good comprehension of the issues that we're facing, what the potential impacts are, it's really time to move into that next phase of trying to understand and quantify vulnerability, exposure and sensitivity of resources. We can't really develop strategies. We're sort of paralyzed without that vulnerability information so I believe that's our next step and something that we need to focus pretty hard on and then that will kind of

get us to the point where we can develop some strategies and understand the impacts of those strategies will have on the reducing vulnerability.

So adaptation challenges. I could have put about 10 slides in here, there's tons of naysayers, tons of skeptics, tons of reasons that people think we shouldn't be doing this stuff. I would fall back to what Dolan said there's unanimous agreement in the science community that it is not okay to do nothing. If we have some degree of uncertainty in our science there's always uncertainty in science. Any good scientist will tell you that. So we need to be accepting of that. We can't allow uncertainty and lack of information to paralyze us from doing anything. We need to be making some forward progress.

Lack of organization certainly an issue. We have a ton of partners in the Pacific region doing all sorts of climate related and hazard related stuff. We know a lot of these people, Sea Grant is uniquely positioned in the university so we're able to reach out to a lot of these groups. We work pretty closely with the counties. We have positions like Tara and mine that are actually in the County Planning Departments working with your staff but it's up to us to do a better job of collaborating and forming projects and forming partnerships together. The main reason behind that being that there's a huge amount of Federal and State money available right now. Millions of millions of dollars. It's staggering how much money is out there to fund climate related projects and to date Hawaii has not received a large share of that funding because we are not organized. We're not doing a good job of collaborating and more importantly demonstrating that collaboration to the funding sources. So we need to demonstrate our capacity. Demonstrate our ability to collaborate and our ability to leverage resources to make sure that we can compete for that money and be able to fund the research that will give us the scientific basis to understand vulnerability and develop our strategies for climate adaptation. So that would be a take home message for sure.

Confusion regarding some of the legal issues such as takings and the feasibility and legal aspects of shoreline armoring options. ICAP's working on a report summarizing issues surrounding the taking clause right now. I'm very excited to see the results of that and I think Zena will probably talk more about that in a moment.

I already spoke about the uncertainty, you know how I feel about that, and again the bifurcated regulatory framework along our shorelines Tara mentioned that earlier so I don't want to belabor that but that is certainly issue and there's some potential ways to get around that in the short term that I'll talk about in a moment.

Opportunities. So the smiley face on climate change. There's a really strong body of knowledge out there. The international community is well ahead of Hawaii so there's a lot of work that's being done. We're in a great position to not have to move backward and undo past mistakes. We think that you need to move forward in sort of a step by step pace and continue to do good work. Our current activities are consistent with folks in the international community have done so we're doing the right stuff, we're just doing it at a little bit slower pace so that's fine. Already talked about the availability of funding, it's there, it's waiting for us. Opportunities for collaborative partnerships. There's tons of them out there. I mean, this is a great example of that. We have representatives in the room from a lot of different sectors, a lot of different levels of government, different organizations, academia. And then the ability to integrate with existing frameworks. Dolan

mentioned that and that's another take home message I would say is that we already have the tools to do a lot of this work. Our shoreline rules, our SMA rules are just a couple of examples. Some minor modifications to those things I think could really go a long way in terms of helping us to feel like we're addressing this issue of sea level rise at least in the short term. So I think that we can build on what we're already doing.

I was joking earlier, I can't remember but somebody here might remember what was the old commercial on T.V. where they said we don't make a products that you use, we make a lot of the products that you use better.

Mr. Starr: Dupont.

Mr. Buika: BASF.

Mr. Bohlander: I said BNSF. BASF it was. Who said that? Thank you Jim. Thank you. Okay, well that's what I think about climate adaptation.

Mr. Buika: I watch a lot of T.V.

Mr. Bohlander: Hey that's awesome dude, you're a trivia maniac that's killer. That's what I think about adaptation though. We're not trying to make a whole bunch of new stuff, we're just trying to take the stuff that we already do and make it better so that's maybe another take from this.

So where does sea level rise fit. I'm going to move through this pretty quickly. Point of the slide is that it doesn't just fit under the purview of planning and under the planning commission. It fits in every single sector of government. Obviously in planning we're dealing with shoreline setbacks, zoning, subdivision codes, it all fits into that. Civil Defense has a mitigation plan, evacuation planning, post disaster recovery planning which we talked more about. Public Works, agricultural, looking at drought, irrigation issues, runoff. Environmental Management, solid waste, wastewater management, Parks and Rec., tourism, beach parks, beach restoration, transportation dealing with road closures, highway maintenance, bridge maintenance and obviously your water supply. Tara mentioned the issues but intrusion into aquifers with ocean water. So sea level rise fits everywhere. It's not something the Planning Department or commission can do on their own so I really encourage you to reach out across sectors, across disciplines, across your departments and identify people that are motivated and able to participate in this and build yourself a local constituency to address the issues. Don't try to do it by yourself.

So adapting to sea level rise, moving forward. Three primary options. Managed retreat, you've already heard this concept, increasing shoreline protection, i.e., hardening and accommodation or adaptation. All three have advantages and disadvantages, I'm going to show you a few of those and in terms of what you end up doing here it's likely that there'll be some hybrid of these three with an emphasis I would say on number three.

Managed retreat this basically is a long term strategy that implies making tough choices about what areas and what uses are going to be moved out of the hazard area in this case your shorelines. Very difficult to implement, potentially very expensive in terms of loss of market value for properties.

It is the most effective form of mitigation in that in some cases it can eliminate vulnerability altogether. In most cases it's a significant reduction. So managed retreat in that regard is a great option. Requires strong scientific justification. There's going to be a huge push against this so if this is a strategy you wanted to employ you'd really have to have the scientific basis for it and I would say the economic analysis too.

Protection, you know we talk a lot about shoreline hardening. This, like managed retreat, would involve some very hard choices about choosing which properties to protect and why and which properties to let Mother Nature take back and why. There's obviously some social equity issues built into that as well as some market ...(inaudible)... It gives us a couple of pros and cons. I think probably the biggest one that sticks out to me in terms of ponds is that it's any direct conflict with our kind of current attitude towards shoreline hardening because this would take us the other direction and we would sort of re-embrace shoreline hardening. We spent the last 10 years trying to move away from that, this seems like a it would be a huge step back for us, but I also acknowledge that it may be something we need to employ at least on a limited basis too. Preserve some of our infrastructure and so of our key economic features.

Accommodation the last option, sort of synonymous with adaptation it's our most flexible and adaptive approach. It lets us make incremental changes over time, utilizes all other existing policy tools and regulatory framework. The chief challenge with this is the balance of assets, the economic versus the environmental and that's an issue that is not unique to climate it's been there all along and then the implementation requiring public support and political will and that's really where I think Sea Grant can be helpful in terms of education and outreach. You can't have public support without a strong education outreach program to drive that and without the public support the political will is like we're not to be there. So I really think that Sea Grant could help in that regard in terms of driving the education campaign along with you.

So this is the adaptation tool slide. Just going to be another five slides long. Really there's so many different options that you have, there's so many different types of tools that you can employ. I'm not from Maui County, I don't understand your local issues and at the end of the day adaptation is done at the local level so I'm not prescribing any one of these. I think most of you are familiar with most of what these things are. Setbacks obviously everyone knows how we're doing with that. High risk area disclosures would be in real estate disclosures for homes that are in erosion or inundation areas. The result of that is you get more educated homeowners. The bad is that it doesn't necessarily change vulnerability because a lot of them will still buy. Using financial incentives through your insurance system and your tax system. Potentially good options, very difficult to implement. Beach management plans, we're experimenting with that on Oahu right now with the Kailua Beach Management Plan. It's been very successful. Dolan's had a very instrumental role in that and lots of other potential options here. I could talk for 20 minutes about each one so if anybody's interested in one specifically I'd be happy to talk to you kind of offline about it. The point I wanted to make is that we have all the stuff available to us. It's just a matter of looking at the local issues, understanding your vulnerability and deciding which one or more of these is going to meet your needs for Maui County specifically.

Brief discussion of shoreline armoring. You have a couple of options. Everybody sort of knows what the problems are. The second bullet here is very important. There's a lot of argument back

and forth about the impacts of Seawalls. Some people say they don't have any impact, some people say they have huge impacts. So I think to fund a study to evaluate the impacts of seawalls specifically in Hawaii is important. Chip and his group have already done a lot of this work short of integrated into the coastal erosion studies that he has done but really sort creating a scientific basis for your argument against seawalls I would say. You have the option to prohibit new shoreline armoring. Tara mentioned that that's a policy that's been implemented on the mainland in several areas. There are some advantages and disadvantages to that obviously. You have the option to remove existing structures. Difficult thing to do. You have the option to expand the shoreline area. This is an option that the counties have where it's written into your rules that you can expand the definition of the shoreline area to go from mean sea level to the certified shoreline. The advantage with this would be that most Seawalls that end up being bifurcated by our regulatory system where it's either been a state jurisdiction or it's sort of in the state and the county, it would place those in the county jurisdiction so you would have more control at the county level over making the decisions regarding seawall repairs, reconstruction or new permit for new seawalls. So that's an option you could pursue with the state. I'm sure that Dolan could help you get the right people at DLNR to start those discussions. That's another option as to enter into a conditional MOU, Memorandum of Agreement with DLNR to deal with those bifurcated situations. If you have sort of a split jurisdiction issue regarding a seawall or any other beach related project you can have a conditional MOU where DLNR might be willing to offer you jurisdiction over it on a conditional basis. I'm not sure how that would work exactly but it's probably a conversation worth having. And then finally promoting beach nourishment and beach stabilization. I shouldn't have used the word promote there, I think you know what I'm getting at though, trying to look for softer solutions is sort of what I'm getting at. So we have all these different options. I think everyone wants to move away from shoreline hardening or kind of wondering how to do that. So hopefully a combination of the takings report from ICAP or the work that Chip is doing will help give us the scientific basis and the legal basis for moving forward with one or more of these options.

So recommendations for Maui. I'm not going to read all these to you. You can read for yourselves. I would encourage you again as take home messages really try to use the existing tools that you have, your shoreline rules, your SMA rules, your existing planning frameworks, existing plans, the Maui Beach Management Plan, your County Hazard Mitigation Plan, any great adaptation concepts under the things that you're already doing, the things that your planners are already savvy of doing. Don't make it some new thing that you have to invent on, you know, to hire new people to do and build new training systems for, it's not that big. Support research for sea level rise, again that collaboration working with the right partners, looking for funding opportunities. The money is there, it's just a matter of demonstrating our ability to collaborate with each other and leverage resources so please get more involved with us on that, encourage your planners to that. Invest in water sustainability planning I think this is something that gets overlooked fairly frequently. I'm not sure so much here but in other areas it is. Fresh water is an at-risk resource here especially in terms of sea level rise so investing in some sort of water sustainability planning would be a good option. Designating a central office, centralized office for adaptation planning I think is a good idea. In this case it may be the Planning Department would be a logical choice you may have another department in mind but would have additional resources that could fit that role. I like the idea of creating a climate advisory group taking members from each of these disciplines and sectors, you know a person from each affected department putting them on an advisory group that can communicate with people like Tara so that the county's needs are funneled up through Tara for all

sectors and she can funnel those up to the university so we can keep those in mind as we look for research opportunities. I like the idea of that. And then consider hiring a full-time grant specialist. I'm sure I am not first person to recommend this to you. This is the type of position especially under the current circumstances would pay for itself within its first year I guarantee it. There is so much money out there if you had somebody do the research and help do the writing of these proposals to work with folks like myself, Dolan and Chip that are looking for these kind of opportunities it really would pay itself off in a short amount of time so that's another thing to consider.

These are sort of the guiding principles. I've said all this already so I'm not going to reread it. But these are the things I would encourage you to keep in mind as you move forward considering adaptation planning for Maui County. So I thank you for your time and I'm happy to answer any questions that you might have and I'll be around in the afternoon as well so we can talk offline.

Mr. Starr: Okay, thank you very much Andy, good presentation. Anything for, a quick question or parking lot stuff? Okay, Commissioner Wakida.

Ms. Wakida: I have two parking lot issues. One is couple presenters have mentioned specific recommendations that could be made to make minor changes to the current SMA Rules, if we're going to be discussing that at a future time I would like to see their rather than us reinventing the wheel, their specific recommendations that they would make that we could consider.

Mr. Starr: Yeah, just to speak to that a possible direction and frankly my own hopeful direction is that we pass it to our staff, the department and also the good folks of Sea Grant and ICAP to come back with recommendations for us in a month and two and then we can look at that and maybe add or take away but at least we're not just out trying to reinvent the wheel.

Ms. Wakida: Yes. And my second was, and maybe I'm alone on this because I'm new but I'm little confused about this bifurcation or joint jurisdictions in the state and the county because in your opening remarks you said we had shoreline – we had the total shoreline responsibility so at some future time I'd like to get a better handle on this.

Mr. Starr: I believe it's above the high water – wash of the – what's the definition Jim?

Mr. Buika: It's the mean high sea level is county mauka of that, makai of that is state.

Ms. Wakida: But the coastal zone goes into the water. All the land but some marine.

Mr. Buika: Yes, and the coastal zone is managed by the state with home rule for up to the shoreline to Maui County or – yeah, within county jurisdiction.

Mr. Starr: Yea, I'm intrigued too by what we just heard about that and so lets – we'll keep that in our parking lot.

Mr. Buika: Sure. As an example, we have seawalls that are failing all over the island, 40, 50, 60, 70 years old so what do they want to do, they want to add six inches to the makai side and put on a facade right on the makai side, well the shoreline is the seawall, so I mean, we're right there at

the fine line dealing with two jurisdictions and it's a tough issue to deal with.

Mr. Starr: Yeah, and I think we all agree where we can simply we can do more, we can have our staff do more good rather than having to chase the – chasing the county etc. Commissioner Mardfin.

Mr. Mardfin: Also with regards to not reinventing the wheel we ought to get Lanai SMA Rules and Molokai SMA Rules they may have had some ideas that we could consider.

Mr. Starr: Okay, but we don't – that's not our jurisdiction so.

Mr. Mardfin: No, but they may have SMA Rules they want to adopt as Maui SMA Rules conceivable.

Mr. Starr: Okay, I'm sure staff could look at that when they do it. Lets move right along because I really love our next speaker. I've learned so much from him over the years. He's done more to educate people in Hawaii about beach erosion and the problems of hardening. I know his teacher Warren Pilkey, I know I'm embarrassing Chip. I really love the guy, I hope he comes back here again. Go ahead Chip.

Mr. Chip Fletcher. Right, so I'll move along. My research group at the university has been under contract with Maui County on a couple of occasions to provide you with shoreline change data and about six to eight years ago you changed your setback rules so that on certain properties the setback is a function of the amount of erosion that will take place over the next 50 years. We've updated the shoreline change data for the Kihei Coast and I'm going to describe that process to you and show you some of our early results or final results actually and then also talk about a methodology that we used for planning the schedule of sea level impacts on sort of a decadal basis going forward.

So everybody has had their shot at discussing different adaptation strategies and NOAA and the U.S. Geological Survey held a workshop in December in which they had published a proceedings. They have a 10-step adaptation strategy held a community framework for responding to sea level rise and inundation and a lot of the details that you've been hearing so far are embedded in one of these 10 steps but this sort of puts it all together into a nice menu to follow. So I'll be happy to make this available to you although it's my only copy, but you can make a copy of the pages.

One of the things that came out of that workshop is that it's important to explore the issues of sea level rise with the community and that's exactly what's taken place here and to identify the geographic scope of the problem and the time scales of concern and this basically means maps and also developing a sea level rise model so that we can say something intelligent about sea level rise from 2020 to 2030, from 2030 to 2040 and I'll give you a model that we've developed for doing this. And to map the vulnerability and use these to guide development and you saw how California has mapped sea level vulnerability and they've counted up hospitals and sewage treatment plants and highway distances that fall within a zone of potential inundation. The maps that we provide you with could – the next step is to take them and to overlay the GIS layers of infrastructure and population and economics and everything, all the GIS layers and count up the assets that are at

risk within the zones most likely to be flooded.

Also related to sea level rise is coastal erosion and you've been following the recommendations of the National Research Council that came out 20 years ago and said that localities should use historical shoreline change rates to guide development and in fact, your setback is scaled to that. The problem is that the date that you use for your setback is shoreline change over – largely the 20th century and we're going into era of accelerated sea level rise so we need to keep that in mind.

So mapping sea level inundation and mapping shoreline change all begins with aircraft. We use vertical aerial photographs that Maui County contracted in 2006, you flew a set of air photos circa 2007 and we have used those to map new rates of shoreline change for you. Aircraft are also used to map the micro topography of the shoreline and what's known as LIDAR which is a laser shot of the fuselage of an airplane that maps the topography within about 25 centimeters or with a tolerance of about a foot and so we use that data to make sea level inundation maps or vulnerability maps for you.

We use these high resolution vertical aerial photographs, we find common points between successive photographs. They overlap at about 60%. We make a mosaic with these and then we take these mosaic of aerial photographs and we correct them for distortion using the LIDAR data what's known as a digital elevation model. So the high resolution topography allows us to correct our high resolution air photos and that's something that we've done for you and we use that then to correct air photos that have been taken in the past since World War II we have roughly a set of air photos every decade plus or minus. Prior to World War II we have a set of maps that were made, we understand the errors and uncertainty in those maps and we use those as older shoreline positions. So basically we have about 80 years of shoreline position data at Kihei, West Maui and North Shore areas and we use this to map rates of shoreline change.

So with our modern imagery once it is corrected we then digitize the low water mark and that's this red line. We also digitize the vegetation line which is this yellow line and then we do that to the historical imagery. Here's 1950 and 1975. These are orthorectified, corrected and these give us a set of historical shorelines that we then overlay on our modern air photograph and we then set a grid like this known as transects, each yellow line basically if you turn it on its side can be a X Y plot with distance of shoreline change and time and each one of these colored shorelines has a different time associated with it over the last 80 years.

So we make a set of maps for you. These transects are marked. Here's transect 224. So let's look at the X Y plot of transect 224. We have a shoreline here that's World War II, we have one that's slightly after World War II in the '60's, '70's, '80's, '90's and there's our 2007 shoreline, the most recent one. We fit a linear regression to this and the rate of change here at transect 224 is erosive, negative sign at about six-tenths of a foot per year with an uncertainty of about eight-tenths of a foot per year. So we take this data and we plot it as a histogram basic bar graph. A rate of one-foot of erosion is shown in that white line, a rate of two feet of erosion there and then this would be accretion. So you see red bars for erosion and blue bars for accretion. We can then use that data if we multiply the annual rate of shoreline change times 50 years. We can use that to define an erosion hazard zone and there's an uncertainty of 95% confidence ...(inaudible)... two standard deviations around this 50 years hazard

marker.

So we finished mapping the Kihei Coast, over the next year we'll map West Maui and North Shore and here I'm going to present to you the results of our study of the Kihei Coast. We measured a thousand transects, 1,011 transects from Maalaea Harbor to Big Beach. These are spaced every 66 feet along the sandy beach. The average rate of change of all of these transects together was erosional at a rate of about four-tenths of a foot per year. The maximum erosion rate is about three and a half feet per year. That's at transect 615 which is in the ...(inaudible)... map area here and our maximum accretion rate is at about five feet per year, 83% of all the transects are eroding. So you can say that 83% of your Kihei coastline is eroding and the average rate of those eroding transects is seven-tenths of a foot per year, 17% of your shoreline is accreting at an average rate of about eight-tenths of a foot per year and since World War II basically the era of air photography that we have you've lost about a mile of beach or about 9% of your shoreline. The vast majority of this is due to seawall building but there are a few places where the beach has eroded back to a lava or red clay geology.

So let's work our way down through the nine maps. Again, red is erosional you can see that the entire Maalaea Harbor shoreline has long term chronic erosion as we come down through Kealia Pond again, long term chronic erosion. Each one of these transect locations lines up with a particular histogram bar here. Turning the corner coming due south through North Kihei we see our first accretion it's rather modest accretion but it's associated with the pier right here. We tend to get net northern transport of sand here because the south swell comes in and pushes it to the north and so we have a little accretion that's taking place immediately south of that pier but then erosion starts to take over again.

At Kawililipoa shoreline we have our second and third locations of accretion which are associated with either revetments or fishponds or down here you have storm coral rubble which has migrated over the last 50 years and attached to the shoreline. Basically, it's fair to say that the entire Kihei shoreline is eroding except where there are localized factors that trap sediment that would be a pier a groin, coral rubble, etc.

As we get down to Halama Street there's another groin right here which has been trapping sand and so there's localized accretion but then quickly it turns to erosion. Continuing south we get into the Kamaoles. Kamaole 1 has modest accretion, Kamaole 2 and 3 have modest long-term chronic erosion.

There's North Wailea, again, less than sort of averaging less than a foot of erosion per year except down further south, it's reaching about a foot per year. South Wailea typically chronically eroding, Big Beach in Makena also chronically eroding but your rates of erosion typically are less than a foot per year, on many mainland shorelines a rate of erosion of two to three feet per year is very common but this is also typical of carbonate beaches. We are not sand rich beaches like many mainland shorelines are.

We're also providing to your Planning Department plots at every transect so that in addition to the long term rate you can just sort of see the history of shoreline changes and whether there were periods of stability and periods of erosion and accretion and the history. So that's able to be

interpreted by your planners and then we have the data, the ...(inaudible)...rate and uncertainty around that rate.

Transect No. 1 is at the south end of Big Beach and they will be numbered consecutively around the entire island. So you'll end up at Paia with transect no. 3,000 or 4,000 or whatever it ends up being so you can refer to specific locations by the transect number now.

It is possible for us to take the erosion data and to plot an erosion hazard zone. If you're interested we've talked with the planners about this possibility, we're discussing that. In this case the dark red line is 50 times the annual erosion rate plus 20 feet which is your setback and then we have the two standard deviations plus or minus on that and we plot this from the veg line, not from the toe of the beach but from the veg line. Okay that's erosion, that's the latest information we have for you and a description of the planning tools that will be available to you.

Lets move onto sea level. Another part of our contract was to provide maps of potential sea level vulnerability to you. These are simply going to be contour maps for you using that LIDAR data. This is a map of the rate of sea level change taken by satellite every 10 days since 1992. And you can see that it's a highly variable surface. Down here in Micronesia and the West Pacific you've got sea level rising already at 10 to 12 millimeters per year. This is already exceeding a meter per century. Over here off of the coast of California we see actual sea level fall. The latest research suggests that this pattern is due to an acceleration in the tradewinds. Now you may think that an acceleration in the tradewinds would bring more rain to our mountaintops because our rain is due to the orographic effect, it's due to the rise of these warm moist tradewinds up to cooler altitudes where it then condenses. The problem is as you were already shown, the air temperature is warming so while the tradewinds might be accelerating and hopefully bringing us more water, the air is warmer up there so the amount of condensation is less and that result is as you've been told that we have net decrease in annual rainfall that's taking place here but in that crease in rain intensity which has a lot to do with potential drainage problems associated with sea level rise that I'll talk about in a minute.

Notice Hawaii sort of is still escaping the acceleration story here. We're right at about one and half or one millimeter per year of sea level rise. That's been our rate of sea level rise over the 20th century except that Maui because of island subsidence has a slightly faster rate of sea level rise. So Tara showed you this, this is a plot of all the recent research that attempts to answer the question of how high will sea level go this century? And of these papers the Vermeer and Rahmstorf paper was published in the proceedings of the National Academy of Sciences just a few months ago. It's a highly respected paper by a couple of highly respected authors and it also matches what Feffer had proposed here. Feffer took the IPCC projections of climate change and added the missing component from the IPCC which was dynamic glacial flow from Greenland and Antarctica. So we added a missing component and basically corrected the IPCC and said you know what we can expect as much as two meters of sea level rise or a little as .8. Vermeer and Rahmstorf have basically the same range. So you can use Vermeer and Rahmstorf and this is their plot from 1950 to present day we have observed sea level change and then you have their projections of sea level change depending on how much heating takes place.

Well, how much heating takes place is going to be dependent on how we behave as a planetary

community. Are we going to burn every last lump of coal and drop of oil in the ground and produce more greenhouses grasses or are we going to attempt to move quickly off of carbon-based fuels into non carbon-based fuels? So B1 is an economic scenario where we quickly move into renewable energy and not carbon-based energy and A1 F1 is where we burn every last bit of carbon that's in the ground. So their range of sea level rise is from .75 to 1.9. If you add subsidence of the Island of Maui to that we get a range here locally of .8 to 1.97. So you can consider the Vermeer model as a best case scenario and a worst case scenario and one thing that this NOAA USGS workshop suggested is that we go forward with our planning on a scenario basis, best case, worst case. So I'm recommending that these would be our two cases that we use.

The problem is now we have an end point for where we think sea level may be, one of these two points but we don't know what it's going to be doing in between now and then. Sea level may or may not follow this nice smooth curve, plus from one year to the next sea level has a lot of variability. So our solution to this is to take the Kahului tide gauge. This is 50 years of sea level change in Kahului Harbor and to use that as a model for our best case scenario and our worst case scenario. So we take your past water level behavior and we basically run it up to .82 meters by the end of the century and a worst case scenario of 1.97 meters by the end of the century. And in this water level, we're going to propose, again following NOAA recommendations that we map sea level vulnerability relative to mean higher high water, in other words, that will be datum that will be our contour lines on our vulnerability maps. So if we know that then we can ask lets say we have a road like Honoapiilani Highway and the average elevation of that is about 30 centimeters above mean higher high water, what is the inundation schedule going forward and we can begin to define an accedence how often using this model will that elevation become exceeded until it's finally inundated and that will give us a schedule for mapping the problem on a decadal basis.

Now what I show here is about 30 centimeters or 25 centimeters. That's actually the highest resolution map we can make using the LIDAR data. So that's why I put that horizon up there.

Okay, mean higher high water just real quickly this is a daily tide we have for a few days every month we have a very high tide where there's a full moon then we go to a quarter moon where the high tides are low then we have a new moon where the high tides are higher again then a quarter moon then a full moon, quarter moon, new moon. Each one of these high tides of the day is averaged over the year and that's what our mean higher high water is that red line. So that's our datum.

We haven't finished the maps for Maui but we have made for instance in Waikiki a map showing all the areas that fall within 25 centimeters of mean higher high water. This is something that we plan on providing for you. We can do this for 50 centimeters, 75 centimeters and one meter and we can color code each one differently so you'll be able to see the area that falls in the vulnerability of the different levels.

A second way to assess sea level vulnerability is to look back through recent history and ask how has temporary high sea level already affected our shoreline and it turns out that in 2003, we had sea levels that were high for a couple of months. The Kaanapali shoreline fell apart and we had a severe problem with erosion on the Kaanapali shoreline that quickly corrected itself when sea level fell again. What happened was that there was temporary extreme tide, an extremely high sea

level that lasted for several months at the end of the summer. At the end of the summer, the ocean is warm and so the water is high. At a full moon high tide it's a little bit higher. If you put a couple of waves on top of that it's higher yet and then what really did it back in 2003, was what's known as a mesoscale eddy and that's what this is, this is a topographic bulge in the sea surface and these are constantly migrating from Central America out to the West Pacific, they pass through the Hawaii Islands. You can see here that this is August 2003. This thing came in and it raised sea level for a couple of months, in fact there were several of these one right after another that caused all those sandbags to be placed on the Kaanapali shoreline. So we know that whatever level that was caused beaches that are deficient in sand to really fall apart. So that's another mapable horizon for us.

Okay, so here's our best case scenario, a rise of eight-tenths of a meter by the end of the century. This is our schedule. Here is mean higher high water in red. This blue line is the 25-centimeter level which is as low as we can map using LIDAR and the 2003 erosion event is shown in red here. So what's the exceedance schedule? Here's our per year as we go forward of just the 25 centimeter mapable horizon. So we see that in the best case scenario there's not a lot of inundation taking place until mid-century and then it rapidly ramps up in the second half of the century. Here's a worst case scenario at 1.97 meters by the end of the century. You can see in this case the inundation starts by 2040 getting some fairly intense action. This is an exceedance schedule for you for the best case scenario, decade by decade, the hours per year that are 25 centimeter map will be flooded and this is that erosion event, the hours per year that horizon will be flooded and here is the worst case scenario. So this offers the basis for making some planning decisions.

Lets, lets see – so this is blue line represents one meter above mean higher high water and we're coming up along the Kihei coast, Wailea coast you can see that this is fairly high area, there's not much in the way of low land. The one meter contour line largely lays immediately mauka of the beach until we get to Kihei. Now we have a lot of low laying land which is going to be of concern as sea level rise pushes the water table up through the ground surface and that's where we're going to get severe drainage problems and up here at Kealia Pond another area. Okay so lets end there.

So here's Halama map, again, everything in blue and also the purple shaded region is area that lays within one meter of current mean higher high water. These are areas where severe drainage problems can be expected, Halama, again a large area laying within one meter. Whale Sanctuary, wetlands back here, Azeka Town Center north of the Whale Sanctuary. We'll be providing you with not only this one meter map but a 75 centimeter, 50 centimeter and 25 centimeter all different color coded and the 25 centimeters should be much smaller than this, 50 will be slightly larger, 75 will be slightly larger still and one meter will be our largest.

The impacts have been spoken about accelerated and expanding erosion. We can expect wave overtopping and increased vulnerability to tsunami and storm surge. Drainage and flooding problems I think are going to be the major problems that we have to deal with. The rise of the water table, a decrease in rainfall, however an increase in the intensity of rain, high tide inundation and when you get a coincidence of intense rains, high waves and high tide our drainage infrastructure will be filled with sea water and the intense rainfall won't have any place to runoff. And our overall

water resources I think are also, also the other 800-pound gorilla in the room.

How do we respond to this? You've had a lot of discussion of this. There's avoidance and we can change our building codes in potential inundation areas. We can also attempt to not develop them, keep away from them. I think the first thing to look at is to talk to the transportation people, the public facilities people and ask them where are you already having problems with your roads with regard to drainage and those will be the first hot spots for sea level rise will begin to affect that and other public infrastructure. Begin to consider culverts, raising the bed the road or actually raising the entire road itself in sort of a low bridge, your especially important highways or move them completely away from the shoreline. Assess the drainage network, how we're going to deal with this problem of increased runoff, drainage issues. If you want a beach you can't amour. Perhaps the only option you have is to purchase the abutting land because in the end all of our planning rules have a variance for hardship and you know, in the end I think it might be likely that someone wanting to get a seawall can plead hardship and can trigger that variance. So purchasing the abutting land.

So a decision making process has to start. You've got Big Beach, the land behind it doesn't seem vulnerable, I don't know the status but it doesn't seem vulnerable to development, make sure it stays that way. There are a few other beaches along the Kihei coast where you would really like there to be beaches in the future. You want the land behind the beach to be sand rich, you don't want it to be clay or rock. So that when you erode into that sand rich land you still have a sand source, you still have a beach there. And then otherwise, you're going to have to update your armouring policy, where are you going to allow seawalls and where are you not going to allow seawalls. I think it's a very complex issue. Can you just keep saying no to everybody? And then how are we going to overall occupy the coastal plain in 50 to 100 years and I think we're all done with that. So thank you very much for your time.

Mr. Starr: And thank you Chip and thank you for – to see this stuff evolve and to become finer as years go by is really impressive and you're really doing us a great service with it. Commissioner Mardfin.

Mr. Mardfin: Chip can you go back to that – it was fairly early on maybe 20% in you had a picture of 224, the transect.

Mr. Fletcher: Yes.

Mr. Mardfin: Could you go back to that a minute? I want to ask you a specific question about it.

Mr. Fletcher: Well, I will have a surprising answer for you but go ahead. That happens to be on Kauai and we just finished mapping it, the Island of Kauai.

Mr. Mardfin: That might have been it.

Mr. Fletcher: Anyway, you remember your question?

Mr. Mardfin: Yeah, I wanted you to look at the data points and there was something that struck me

as rather, you know, not strange but troubling about it.

Mr. Fletcher: Here you go.

Mr. Mardfin: That's the one. That downward slope is very sensitive to the selection of years. If you would started in 1960 rather than probably 1930, if you started at 60 you'd say there's no decrease it's flat.

Mr. Fletcher: That's right.

Mr. Mardfin: So this is very sensitive to the particular years you pick.

Mr. Fletcher: Well we don't pick the years.

Mr. Mardfin: Well, I mean you –

Mr. Fletcher: We pick the air photography that's available that has the highest resolution. We also do a very detailed job of assessing the uncertainty associated with each air photo. So we have an uncertainty for the tide, we have an uncertainty for the season, we have an uncertainty for the pixel size of the photo and those are embodied in the rate that is determined. But you're absolutely right.

Mr. Mardfin: I mean, if you look for the last 50 years, there's been no change.

Mr. Fletcher: Right, you're right about that.

Mr. Mardfin: For all intents and purposes.

Mr. Fletcher: Well, we want to test that. Maybe there has been – there's likely been a different rate of change than the full data ...(inaudible)... This is just the nature of statistic and choosing data ...(inaudible)...

Mr. Mardfin: I understand. I'm an economist so I, you know, I'm used to – we have the same troubles – you know are going to start picking in 1928 or you're going to start picking in 1950. My second question you show these erosion rates those are based on historical data so they're not taking into account sea level rise.

Mr. Fletcher: Right, and I mentioned that early on. They're taking into account sea level rise over the 20th century.

Mr. Mardfin: Yes.

Mr. Fletcher: But not the accelerated rise.

Mr. Mardfin: But not the accelerated sea level rise. So these erosion rates are underestimating. I mean this goes to the other side.

Mr. Fletcher: Potentially yes.

Mr. Mardfin: Potentially underestimating the amount of erosion.

Mr. Fletcher: Sea Grant put out a handbook for coastal management and in there they recommend a methodology for taking erosion data and adding a component for future sea level rise, future acceleration.

Mr. Mardfin: Okay, and that should be in our parking lot question.

Mr. Starr: Okay, more discussion. This is an evolving project and ...(inaudible).. good about it. Commissioner Wakida did you have something?

Ms. Wakida: No.

Mr. Starr: Okay, anyway lets keep moving along. We're doing great here. Our next presenter, you want to introduce her?

Mr. Buika: Sure this next presentation is by Zena Grecni who is the program assistant for the Island Climate Adaption and Policy Program at U of H, Center for – and she's going to briefly talk about the program and the potential collaboration with the Maui County and the Maui Planning Commission. Zena.

Ms. Zena Grecni: Thank you Jim and thank you Chair and the Commission for hosting us today.

Mr. Starr: Try to use the mike as best you can.

Ms. Grecni: I'm a little tall for this I think. So when I saw the agenda I wondered if my job this afternoon would just be to keep you folks awake but it seems like ...(inaudible)... our speakers so far have been so engaging it won't be a problem. I'm always impressed and amazed with what Dr. Fletcher is doing in his work. So thank you very much and it's such an important information moving forward.

As Jim said, I am Zena I work for the Center for Island Climate Adaptation Policy or ICAP which is much easier to say. I know the meeting has been long so I'm just going to take a few minutes and present some options for how ICAP might assist the commission in their planning in the future.

As we've seen today responding to the risks of climate change represents one of the major challenges facing Hawaii and the global community and most of the attention to date has appropriately been placed on actions to reduce the emissions of greenhouse gases but some degree of future change will occur regardless of future greenhouse gas emissions and adapting is necessary especially in an island community like Hawaii. We have to realize that our past emissions have already begun to affect our current climate as we've seen today there is clear and convincing evidence that we're already experiencing these changes.

So two things need be addressed. First we must take action to reduce greenhouse gas emissions

to limit both the rate of future change and also the magnitude of that change and second we must take action to minimize the cost associated with the unavoidable climate change that is already underway and will continue for the coming decade. So I think it will take really strong leadership and focused support and that way we can achieve an effective response to climate change and I think that the county government definitely play an essential role in providing this leadership.

So ICAP was founded in 2008 when a group of lawyers, planners and scientists who had been meeting for several years to address issues of coastal erosion and beach retreat recognized the growing need for multi-disciplinary approach using tools from several disciplines applied to problems that are affecting many different sectors. And they knew that this would be especially important to address climate change because there are so many challenges that are new like sea level rise.

So ICAP was convened to facilitate a climate conscience future for Hawaii, the Pacific and global island communities and we do this through generating and compiling scientific research and research from many disciplines and by developing innovative policy solutions to climate change that fit the unique needs of island communities. So ICAP tries to serve as a two-way conduit between the UH climate expertise and island communities and bring in the scientists, law experts and other academic specialists you need to confront these challenges. So we're really here to assist government entities, elected officials as well as the private sector and hope you manage the risks of climate change because it's really about managing risks.

So this is their conceptual diagram of ICAP. It's a little small but ICAP is a collaborative center that works, coordinates its research and recommendations through a team of experts in the Richardson School of Law, SOST, the School for Ocean Sciences and Technology and the Sea Grant College Program, the Department of Urban Regional Planning also known as DURP at UH and Hawaii Nui I Kea School for Hawaiian Knowledge brings an important indigenous environmental knowledge focus to climate adaptation planning. These schools are the primary sources of ICAP related research and we also encourage and facilitate the participation of faculty across campus though and also outside experts and practitioners.

So we begin by listening to an organization or community's goals and their priorities and figure out what is possible and how to accomplish it through specific policy recommendations.

So I'm going to give you an idea about some projects that ICAP's been working on and this will also sort of give you a list of resources that are available but this is not comprehensive. ICAP has been a busy center in the year and a half that it's been around so please contact me if there's something that's not on the list that you think we should be addressing and we might have already done it or we can look at it for the future. ICAP is currently completing analysis of the takings law as Andy mentioned to assess perceptions of takings law in the state and the impact on coastal development and shoreline retreat. And as has been said, it may help clarify what constitutes a taking and what the legal thresholds are for a successful claim. ICAP Director Maxine Burkett who unfortunately couldn't make it today is working on that along with law specialist Dennis Wong and they're collaborating.

ICAP has been working with the Multi Agency Ocean Resources Management Plan Working Group

to assist with foundational research for climate change adaptation planning and where we prepared in partnership with them a framework for adapting to climate change in Hawaii and this offers one approach for how the state could begin to adapt to climate change and prepare. And we're also currently helping them prepare a draft executive order for consideration for the next governor.

This past spring ICAP prepared and distributed, "The Hawaii's Changing Climate Briefing Sheet," written by Dr. Chip Fletcher. This timely document is intended for policymakers and it sums up what is known about Hawaii's changing climate under global climate change right now and there are copies available over there. I also have many extra copies so if you'd like to take some home to distribute to people in your communities I can provide those.

So I want to talk a little bit about how ICAP can assist Maui County and the Maui County Planning Commission specifically. So in addition to providing timely, accurate information in publications ICAP also offers to partner with State and County governing entities and provide technical support on specific projects to improve adaptive capacity. I'd like to echo Dolan here in that we need to start small and look at avenues that already exist for climate change adaptation which is not so different from what we already know how to do well. This touches on a type of strategy that we like to talk about a lot which is the no regrets strategies which would be good for coastal areas and coastal communities regardless of climate change. So even if you don't believe in climate change you might support this just because it will improve your resiliency.

So ICAP can identify some of these important small steps to take and avenues that already exist in state and county frameworks and it's important that we talk about some of the issues affecting Maui County and how they could be addressed through the mandate and charter of the commission. So ICAP could review the SMA Rules and research what could be accomplished by improving the rules and their language for example. We could investigate the legality of proposed amendments and ensure that there are no potential ...(inaudible)... conflicts with State CZM Law or other state laws and then provide a set of policy recommendations for the commission to consider in revising the SMA Rules that accounts for sea level rise, building community resiliency and also addressing all these issues that you are unclear about.

So in order to present a sort of rough time line for how this could happen we could develop working with Jim and other folks at the Planning Department a work plan and find a legal intern to do some legwork and then a supervising attorney by September 1st and present that to the commission. We will then conduct the research over a period of several months and have the report and recommendations by late January or early February.

And we'd hope to have a continued conversation along the way to make sure that the research and the recommendations address issues you care about and speak to what you envision for the future of Maui County.

One consideration is that Director Maxine Burkett is on family leave right now and she will be visiting the University of Oregon in the Fall so you may not be – she won't be available to supervise this project and review the recommendations but we have a number of really good attorneys that we've been working with in the past. We're very familiar with land use law, environmental law who could oversee such a project and are familiar also with ICAP's mission. But we would have to hire

somebody to work on that. So we do need to secure funding for this project.

So I'd like to leave you with a sort of motto for how we might think about approaching planning in the future and it's, "avoid the unmanageable, manage the unavoidable." And here's our contact information. I'm really eager to get to the session, the part of today's session where we talk about this and hear from you all because I'd like to take that back when I go home and take it back to Maxine and other folks at Sea Grant and ICAP. But if there's anything lingering after today's discussion, any questions you have please feel free to contact us at the information that you see.

Mr. Starr: Okay, thank you so much and thank Maxine for us and hopefully this will lead to some good discussions and some good working together. Members lets move along now. We're going to have a presentation from Maui County Mayor's Environmental Initiatives, Kuhea our Environmental Coordinator for the County will have some opportunity to tell us some of the directions we're heading. Welcome.

Ms. Kuhea: Paracuelles: All right, good afternoon, Chair Starr and all the members. Thank you so much for including me in the line up. I know you're looking at the screen but I don't have a power point and fancy graphs and videos. We're just going to talk story. I was asked to come up and share what the Mayor's Office has been doing as far as environmental initiatives of what our focus has been on and it's a lot of things and that's why it's also hard to do a power point because the scope is so broad. That's what makes the job exciting and that's what makes the job challenging at the same time.

Every environmental issue that comes before us is important. We're never going to say that somebody's concern isn't important or valid and we try to address as many of them as possible. When I talk about the Office of the Environmental Coordinator, keep in mind that I'm talking about one person and that's me. If we did not focus on some priorities though it would be difficult to get anything done. So I'll go over what our priorities are first and then some of the other things that we have been working on as well.

Our environmental priorities since the start of the administration has been five basic areas. One is watershed protection, invasive species prevention and management, marine environment and conservation, anti littering and marine debris and alternative energy and I'll explain a little bit about each section very briefly. Again, it's very hard to tell you everything in each of these sections but just to give you a taste of what we have been addressing.

Under watershed protection it ranges from my serving as Vice Chair of the East Maui Watershed Partnership which is the first watershed partnership in the State of Hawaii. It's a huge partnership that has been very successful in management as well as education and outreach and I have been serving as the Vice Chair of that in which entails helping to guide their management plan.

I also assist with the grant process, the Office of Economic Development and the Department of Water Supply assist these partnerships with some funding. So helping to tighten up that process has been something that we've been working on this year. And also helping these partnerships apply for funding in any way we can, providing information, providing letters of support and that has resulted in these partnerships receiving substantial federal and state monies.

I'm also serving as the Chair of the Maui Conservation Alliance and the MCA is basically a hui of resources managers and scientists from around Maui nui that focus mainly on terrestrial conservation, but I do want to note that climate change is a serious concern for terrestrial scientists as well. And so the Hawaii Conservation Conference which I have attended for 15, 20 years now is focusing a lot on that right now.

Invasive species prevention and management. We are a active member of the Maui Invasive Species Committee. Again, also helping to help them focus on their target and goals.

We've done some preventative things like the little fire ant when it first appeared on Maui we were very instrumental in getting the different agencies together to work on a management plan and we are very happy that we have not had any reports of any other populations of little fire ants anywhere outside of Waihee where it was originally located or detected. And that's not to say that they aren't in other places, so we are continuing those education efforts and outreach and working with the little fire ant working group.

Some of you may know that we're also putting together a brown tree snake response workshop and that is for county, state and federal agencies and anybody who works in the outdoors including tree trimming companies or nonprofits like Community Workday Program, Maui Coastal Land Trust and MECO. These are all people that are very key to detecting something like the brown tree snake and hopefully eradicating any one that comes over. This is in response to a major military build up on Guam.

And we're also offering a session for the general public as well because we are of the belief that the only way we're going to really start winning the battle against invasive species is if we engage and empower the community as well as the people who are working in this field. We have to have everyone focusing and using their eyes and ears to assist.

When the Department of Agriculture, although it's a state agency when they were facing cutbacks last year we were very concerned about it because of the influx of invasive species and our food security and so we put together roadshows that incorporated the State of Hawaii, the County of Maui, Maui Invasive Committee and we went around to many communities to bring awareness about this issue and to educate people about how to detect and respond to invasive species sightings.

And also again, assisting getting monies for miconia control and other invasive species. And so even though we're not the receiving agency we feel it's very important to provide the support our partnering agencies to get the monies that they need to do their job.

Marine environment which is what we've talked a lot about today. We have been focused a lot on the marine environment as well. In 2008, we lead a campaign throughout Maui nui to raise awareness about coral reef protection and calling citizens to action in various ways to be more proactive in environmental protection, marine protection and that was instrumental in getting the rest of the state engaged as well.

Some of you may have heard about the roi roundup invasive species tournament. The Mayor's

Office is a founding partner in that and we are very happy that it's become a statewide movement and it's more than just controlling invasive fish. It really is education and awareness and in a educational video that we are putting together now with a grant from Castle Foundation and A & B we are hoping that this – the divers stories are going to inspire others to really start getting more proactive in protecting our environment and our natural and cultural resources. And even if they don't dive, I'm not a diver, but there are things that we can all do to get involved.

Also, again, I'm also involved in the Ahihi-Kinohiwa Management Plan and serving on the advisory group.

And also not forgetting our federal partners in the NOAA, Whale Sanctuary. They were very active in their activities as well and they have been – we've been actually very good partners between the Mayor's Office and the Whale Sanctuary and bringing a lot of education to the public.

Anti littering and marine debris. Of course this is one of the major concerns for marine species and even if you spend any time on the water in a boat you will understand how important marine debris issues are because they can be dangerous when you're out on the water. I still work on Kahoolawe. Of course, Kanapou is one worst areas for the collection of marine debris in the state and if you've never seen it would just really blow your mind how much debris washes up there and it comes from not just Hawaii but all around the world. So we've helped with some grant funding for Kahoolawe Island Reserve Commission to assist with the Kanapou clean up which can be very expensive because it's not like you know, on Maui where you can just take the trash to the landfill but they have to fly it off with a helicopter or ship it off on a boat and that gets very expensive and laborious.

Also serve as a Community Workday Board member, of course that agency is focused on beautification and putting native plants in the ground and beautifying our community and picking up a lot of litter and abandoned vehicles and things of that nature and also serve as a liaison to the Department of Environmental Management which of course addresses solid waste and wastewater.

There are a lot of other activities that we've been engaged in as well. I always say we but it's one person. It's funny I like to work as a team. We've been engaged in a lot or been involved in a lot of environmental education. On KPOA we've had a radio program called Malama Maui Nui that's been playing for two years, over two years now and we've put out over 400 messages on radio. It plays daily to just inform the community about native species, some of our environmental issues, how they can be more involved in protecting the environment. And also focusing on and highlighting the good work that many of our agencies are doing whether it's the county, the state or the federal agencies or nonprofits. I think sometimes or a lot of times that work goes unappreciated.

We really value our partnerships with the DLNR and so I attend the monthly manager meetings and it's a great way for us to collaborate because there are a lot of issues that overlap and a good example would be the Makena Road which runs through Ahihi-Kinohiwa Natural Area Reserve. That was one issue that had gone or has gone unresolved for at least three decades now with the state and the county not agreeing or being able to agree on who owns the road and therefore, whose responsibility is it to maintain it. And so this is something we've been working on since 2007 and I'm happy to say that we are finally at the point where we have a MOU that is going through the

County Council, Committee of the Whole to address. If nobody is still claiming ownership of the road but we have made good ground on identifying the key issues that stand in the way of personal health and safety, care of the natural area reserve, enforcement and so those issues can now would be resolved once this MOU passes and I hope to have a lot of community support for that.

And you know, I could go on and on but I just wanted to talk about one more quick thing and that was enforcement. That is a big issue that when you talk about coastal environments and illegal encroachments, people planting vegetation that should not be there or people who are removing vegetation that should not be happening. Sometimes I think we have our hands tied because the county and maybe sometimes the state does not have the authority to do what they need to do to address these issues. So maybe that's something that can be in the parking lot for this commission to help address.

And so in my role as the environmental coordinator I don't have, personally have the authority to do a lot of these actions but I think more importantly my role is to be a facilitator and to help bring the parties together that can result in some action. I just wanted to note that with every issue that we're talking about, every environmental issue from mauka to makai the common denominator is people. You know, we have the ability to cause a lot of destruction and harm to our environment which then translates to harming our personal safety, our economy, but we also have the ability to fix these situations if we can work together and you know, come to some level of agreement and compromise that allows us to move forward and not get stuck for decades on any one issue and I think that has been the benefit of having this position in this county. Thank you very much.

Mr. Starr: Thank you Kuhea. Members? Okay, we're going to take public testimony. Give any members of the public who want a chance to say something and then we'll take a very short five-minute or less recess. Any members of the public wishing to comment? Now would be a good time. Not seeing any, public testimony is closed. We are going to take a five-minute recess. We'll be back ten after.

A recess was called at 4:05 p.m., and the meeting was reconvened at 4:13 p.m.

Mr. Starr: That's the end of our official presentations, now is the time for us to consolidate and think about what we can do with all of this great information. Mr. Buika.

Mr. Buika: Okay, well the saddest part of all this is that we have all these great people in the room and then we're going to disburse in one hour instead of spending about two more days on all of this. But we'll do what we can. As I stated at the very beginning the outcome of today's session we'd like to come up with a consensus from the Maui Planning Commission for the County of Maui Planning Department to proceed a project aimed at modifying the Special Management Area Rules and/or the Shoreline Rules and Regulations to further protect, develop and conserve coastal resources. So that would be the first thing would be before we leave get some consensus from the commission to move forward. Second would be to have a discussion now led by Jonathan Starr to look at some type of a project, maybe we can get to that today, maybe we can't, maybe you can give us some directive we can talk off line with ICAP, Sea Grant, Planning Department and come back to you in a month or two. We did capture some parking lot issues and hopefully we can define some action items out of this and then discuss and agree to some next steps. So that was kind of

where we want to go at the end of the hour or 45 minutes from now. I did put together kind of an overview of some of the issues real quick. I don't know if we want to spend any more time on that or if you have your thoughts Jonathan, why don't you provide your input and your thoughts.

Mr. Starr: I'd like to take some time and have the commissioners be able to put out their ideas and feeling and if we do find that there's a consensus for the department to work with ICAP and Sea Grant and DLNR and all of the other agencies to create a scope and then maybe you know if that becomes workable maybe in a month or two months come back to us and then discuss our parking lot issues along with that scoping that staff comes back with, but let me open it up to the members who wants to begin. Commissioner Wakida.

Ms. Wakida: Is it appropriate in this discussion to talk about altering the SMA boundaries?

Mr. Starr: Yes, that's certainly something that's part of it. My understanding is that we are, we are the authority in setting those boundaries and if we change them we need to notify – we need to notify the state but that's the only limitation. Am I, am I correct Mr. Buika?

Mr. Buika: I'm not exactly, the rules don't talk too much about the process but my thought on that to follow up would be maybe to work with ICAP and Sea Grant and the Coastal Zone Management Program, Office of Planning to actually get a prescribed process for modifying the rules what are the steps? I'm sure our Corporation Counsel could be involved in that and what the process for doing that would be. I'm not prepared to state what it is right now, but that might be an outcome or part of our project would be a planning process for modifying SMA boundaries because that's certainly is something I agree that could be undertaken especially with our Maui Island Plan, 2030 Plan, with the state of it, we could get our Long Range folks involved also.

Mr. Starr: I did recently in the last several weeks saw a posting from the state I believe it was, what's the name of that gentleman at Office of Planning had referred to Jim?

Mr. Buika: Shih Chou Lee.

Mr. Starr: Yeah.

Mr. Buika: He could be part of the process.

Mr. Starr: What I saw him at is that the county agency responsible for SMA which is this commission can change these boundaries they just have to notify the state but that's certainly an area where we would take wisdom from ICAP and also you know run it through Corp. Counsel. As far as how to do it that process has already partially been done. Because in the Maui Island Plan there was a coastal sensitive boundary area. I think Commissioner Shibuya might remember what the exact term for that but I believe that Long Range Planning has a suggested area where they were recommending this type of scrutiny be put so that might be a starting point to go to Long Range and look at that. Members any other comments on that? Commissioner Shibuya.

Mr. Shibuya: I just did want to identify where our jurisdiction goes and I was just thinking in terms of just describing measuring and describing the water quality surrounding Maui especially at some

certain points or sites and I would say up to 100 yards out from shoreline. If you would measure it and describe this water quality then we would have some basis in which we can start moving to mitigate or change or educate the public as to what's the content of it. Right now it just seems like we're just throwing stones at some problem and trying to see if we can come up with a solution.

Mr. Starr: Can I – maybe Mr. Sparks might have some comments on some mechanisms.

Mr. Buika: I know Russell had to leave and I just got a note from Darla she had another commitment so she was unable to stay to the end here so we don't have our DLNR representative.

Mr. Starr: I mean it might be a useful tool that we can put in the parking lot to look at. I don't think it can every single portion but I think it sounds like they have pretty good ideas of those areas. Commissioner Mardfin.

Mr. Mardfin: This kind of builds on what Commissioner Shibuya said but going out a fixed number of yard strikes me as maybe not – the concept is good but I'm not sure that's the way to do it. I would be tending to think you go out to some given depth like a hundred feet. Anything shallower than a hundred feet is our territory. Anything deeper than a hundred feet is somebody else's, you know we're not going to worry about it and that might have to do with at what depth coral becomes relevant and so there might be some – you know, if we're concerned about corals reefs then there might be some depth beyond which we don't – we shouldn't be terribly concerned because coral doesn't except for black coral might not be at a certain depth. But there should be a scientific input into this as to what the proper number should be.

Mr. Starr: Yeah, I do believe that Long Range has a lot of this already and if we have them come back to us with you know, areas of impairment and areas of recommendation at least we would have a starting, at least we would have a starting point to work with. I, for one, would not really want to generate a new set of regulation and a new framework and a new set of research projects that we're going to have trouble funding or would put added burden onto anyone, but rather look and see how we can utilize what we have and as some of our presenters said, find how we can fine tune the tools we have so that they're a little more effective and you know, and do it incrementally.

You know as far as having the department begin a feasibility study working with ICAP, working with DLNR and Long Range and other agencies and come back to us and present that, you know, can I get some comments on whether there's a desire on the part of most of us to begin that process and it will be a long process but hopefully won't do anything that's going to make it onerous but rather just improve things a little bit.

Mr. Buika: Just a clarification, is this a, excuse me, is this regarding the offshore water, offshore water quality study is that what we're talking about?

Mr. Starr: I was talking first of all in general about starting a process and then we can, you know, if we find that we have you know, consensus or at least a very strong majority that want to do that then we can talk about this – we can add the areas and to me, you know, looking at the SMA boundaries would be one area that where might or might not adjust you know, along with all of the other things we've been talking about today. Commissioner Mardfin.

Mr. Mardfin: Just to throw this in the parking lot but we ought to look at the SMA boundary on the other side. Right now most of the time it's highway and makai of the highway but I can think of lots of areas Olowalu for one where you might well want to go inland from the highway and consider it an SMA, maybe some minimum – some elevation level conceivably or some other mechanism to figuring it out.

Mr. Starr: Well, I mean, I think that that's the first shot at it which we're just basically putting at the first major road was just you know, a way to get started and it was maybe meant to evolve. You know, that's would be what we'd be looking at is you know, possibly doing it and those areas where there's a consensus that it should be changed, we can look at changing it. Those areas where that becomes divisive you know probably would be less likely we would do that. Commissioner Wakida.

Ms. Wakida: Have there been some areas already identified that are problems that we should be looking at specifically? You asked what areas.

Mr. Starr: Yes, and I know of – I know when we were doing the Maui Island Plan that mapping was, was before us. They had specific maps where they were –

Ms. Wakida: No, I didn't mean - I'm not talking about ... (inaudible)... I mean in general the SMA issues that we're now discussing in general you asked if there was some, you know, areas that we needed to work on for the rules and so on and my question is are there already some areas in here, in the rules identified that are problems?

Mr. Starr: Let me pass that first of all of to Mr. Buika.

Mr. Buika: Yes there are. There are a few different areas of the rules that we could look at. Certainly the shoreline, number one here I put together a few slides of various areas on the Shoreline Rules or the SMA Rules and the Shoreline Rules and also the Coastal Zone Management Act. Would you like me to go over some of this just to peak some interest. I can go through them quickly.

Mr. Starr: And this is the beginning of discussion.

Mr. Buika: Sure. Just, you know, plan for and minimize impacts from sea level rise, looking at the Shoreline Setback Rules we have 50 years as a planning horizon now. I know Chip showed the schedule of when all the inundation was going to happen it's going to begin in 2040, 2050 with not much before that so should we be looking at a larger horizon, a time horizon? What we do build in, what we do allow in the shoreline setback areas fairly is fairly substantial, a \$125,000 is a cutoff for a minor structure which could be substantial, do we want to revisit that? I'd like to revisit that.

Have some more discretion with the director in terms of requiring or not requiring a state certified shoreline map can often speed things up that's part of our application requirement now. It can work both ways. Again, you know we brought up this issue of armoring the shoreline with revetments or seawalls. They are illegal, but what does an applicant come in with a shoreline setback variance and again, as Chip brought up, one of the criteria is showing hardship. Well they usually can show hardship because their building is falling into the ocean. Well, how do we define hardship?

Hardship is not defined and we could define hardship a little more. Again, in the shoreline rules the whole bifurcation of jurisdiction is an issue. Andy brought up the issue of we're at the stage now of these vulnerability maps, the exposure, the sensitivity. I think he's right on with that, identifying you know what comes out of that is identifying our critical infrastructure. We know we have vulnerable critical infrastructure, how do we deal with that in shoreline rules for the future.

Second one again is the SMA boundaries that Andy has brought up. The third is control - to control runoff and drainage within the SMA that was brought up and presented by Mike and I think they're looking at some chemical beside sediment control as a topic we could discuss. I don't know too much about that but you know, and then I have an a and b there how do we identify and control it, more runoff, but the second one, what is the process for the commission to effect improved runoff controls mauka of the SMA boundaries, do we have any jurisdictional boundary, can we influence it through our county code through Public Works the erosion control more effectively. I think we can. So I have those noted I have a few others.

Defining prescriptive conditions for shoreline properties, this really isn't coastal zone management the examples I have of heights of walls and view plains but we are losing tremendous view plains down in Makena down there, it's all being walled in like other parts of Maui and we don't want that to happen.

I had - you know, what we did do for some of these shoreline properties, I have another note that I know what we just did do is we passed our Flood Hazard Ordinance this year to have our base flood elevation of plus one foot above the base of the flood hazard ordinance. Can we make it two feet or three feet along the shoreline to begin to avoid some of that, some of this coastal erosion and problems? You know, just do it specific for shoreline properties is an idea. So we could go back maybe and look at some of our major permits for shoreline properties in terms of what were our - not really our standard conditions but what are some of our specific conditions on some of these bigger project? Maybe we can build that into our shoreline rules rather than specifically conditioning them, they could become part of the rules.

Mr. Starr: Best management practices.

Mr. Buika: Yeah because we are capturing those more and more and we're becoming more consistent so maybe we can make those part of our rules rather than having to condition them and then some smaller projects along the shoreline that don't come to the planning commission potentially could have similar types of conditions as part of the rules.

Mr. Mardfin: Mr. Chairman?

Mr. Starr: Yeah, Commissioner Mardfin.

Mr. Mardfin: Mr. Chairman, in light of what we did a couple of weeks ago and we finalized today with the property in Hana maybe we should be - one of the issues was is it a single family dwelling development and maybe we should consider it doesn't matter if it's a single family dwelling, it's development if it's within a certain very sensitive shoreline area.

Mr. Starr: So yeah, so look at the single-family exclusion on when it's properties right on the shoreline.

Mr. Buika: Right and I agree, if I could comment, that that would be a good issue for ICAP to look at legally because I did note that also. This would more be a change under the Coastal Zone Management Law because that's an exemption under the CMZ Law but what is the nexus with our rules and can we influence somehow getting the single family residence exemption for shoreline properties and have it affected through the Coastal Zone Management Law because lets face it I mean we call single family residences not development but what are we developing all over our islands but single family residences and the pressure on the shoreline property - the property values have become so astronomical that what is somebody to do when they buy a piece of property like that they maximize the lot, they build some massive structure that potentially has an effect on the coastal zone and it's threatened and it doesn't come to the commission. It's exempted right now. So it's an issue. That's a good issue that potentially we could.

Mr. Mardfin: We could also be looking at shoreline access too. I mean some of the things that they build a nice big rock wall and prevent access of other people to the shoreline and know there's some of that in the law. I don't know exactly what the details area but we could at least examine what they have to make sure that we're serving our larger community.

Mr. Starr: Yeah, Commissioner Freitas.

Mr. Freitas: Was the SMA addressed in the General Plan, the boundary when they did the General Plan. The SMA boundaries was addressed weren't they?

Mr. Starr: If I remember right it started in the GPAC with creating like a new shoreline overlay in addition to the SMA. There was going to be like another one separate and then when it got to the commission we said well no, it makes more sense to you know, to improve the SMA and then there was a map that was - that was created by Long Range regarding that and some other policies. So you know, perhaps that could be -

Mr. Freitas: We could look at that -

Mr. Starr: Yeah, right.

Mr. Freitas: ...created for the SMA boundaries.

Mr. Starr: Yeah. Mr. Buika.

Mr. Buika: I have a couple more. Andy I think Andy was the one who brought a good point that our adaptive strategies are in essence managing coastal erosion. I think that's what he said something like that. I didn't write down a note, but we do have in our rules that if a structure is substantially damaged by coastal erosion, coastal storm, tsunami, up to 50% it cannot be rebuilt. I don't think we've ever gone there yet from my short time knowledge but we will be going there. And so that's number five, is how do we maybe examining the rules for damage by coastal erosion and then the bigger issue that's dear to my heart is this one number six and I know former Director Jeff Hunt and

myself were dealing with this when we had that tsunami coming in. You know once the response, the issue is post disaster rebuilding, modify SMA Rules and Shoreline Rules to include post disaster rebuilding regulations following coastal storms and tsunamis and again, and then a small sampling of that is are emergency permits right now on a ...(inaudible)... as they happen from big storms. But when we had that tsunami coming in Jeff and I, Jeff Hunt and myself were in the Operations Center we were worried about when that response ended and all the media cameras went away it was going to turn to the Planning Department and all these people if we had a major tsunami come in like in Samoa or Sumatra with all of this damage, how do we rebuild, what is our shoreline setback, what can be rebuilt, what can't be rebuilt, do they need permits, do they need inspectors, what about all the existing permits, all of that stuff - someday we will face it and if that's all policy, that's all planning policy that needs to be dealt with, but if we deal with it beforehand we can possibly get some of that into our rules so that if we do have a tsunami or a major hurricane God forbid we will be prepared. So I think that's an area that potentially could get some funding FEMA, get ICAP involved, get the hazard mitigation community involved and actually get into our rules. I mean, that's number one top on my wish list and it's dealing with the greater coastal erosion and emergency permit issue.

Mr. Starr: Commissioner Mardfin.

Mr. Mardfin: Kind of a related issue is in most of the conditions when we approve things there are statements that you have to have a certain amount of insurance to indemnify the county on different things and it's always a million dollars or two million dollars and it doesn't seem to bear any real relationship to the value of the property and I think at least an aspect of this ought to be how we deal with the liability of the county if something happens. If somebody's foolish enough to build right down on the water, I don't really think the county ought to be on the hook for either buying them out or anything else if they suffer damage from it. And we ought to figure some way to build that into the rules I would think.

Mr. Buika: I'm not sure on the liability. I'm not an expert on insurance but isn't it just for construction are those. Ann do you know those, those are standard permits or standard conditions, do you know the bond where we have the bond?

Ms. Cua: The amount on the insurance, the million dollars?

Mr. Buika: Is that for - Maybe I shouldn't bring it up.

Ms. Cua: It's a standard condition on a lot of our permits and you are correct, it's not necessarily related to the project valuation whether it's high or low. We have that condition on some that don't need a million and some that far exceed a million. That's just what we use. That's something we could take a look at.

Mr. Starr: One other is possibility of tying sand export because that's a needed resource as far as replenishment of beaches. I don't know if that's possible or not but it might be something to look at. Right now we don't have any tools here.

Mr. Buika: Yeah, I agree. I think that goes back to Tara's presentation on mining sand off shore

versus on shore resources and I know we're losing it because I don't fully understand the law but I think that's a state law that potentially could be investigated by ICAP how to limit export of the dune sands that are from here. It's a big issue because that potentially is a source for beach renourishment in the future and our sand study that we did a few years ago, probably about five years ago said we had about five years of sand left and I think our - we're losing a lot of sand. I think that would be - I mean, I could talk it over with ICAP, the legal resources; I will put that high on my list. I don't know if it would be in the rules because I think it's more of a state law thing that sand is not regulated as a mineral. I don't know does anyone in the audience know that?

Mr. Giroux: You're right Jim.

Mr. Starr: Let's not try to solve it Jim. Commissioner Mardfin.

Mr. Mardfin: This is going back to something I said earlier but I've got it clearer in my mind. Right now we define shoreline management area as a certain distance, well generally makai of the highway to the upper wash of the waves and it seems to me it would make much more sense to do it from some certain altitude what the number is is a different issue but like for anything below 30 feet in elevation or 50 feet in elevation to 20 or 30 feet under water strikes me as a much more reasoned way to deal with shoreline management because it's - because it's the processes that do it, it isn't how far it is from the ocean horizontally it's if the ocean goes up by a certain amount - you know, it's not going to go down, but coral survives generally at a certain depth and it seems to me that makes a much more reasoned way to draw the shoreline management areas.

Mr. Starr: Commissioner Freitas. I mean, I think it's not such an easy equation but I think Long Range has something for us to start with. I would suggest we start with that because they did create criteria and then GIS map it. Yeah, we want it to be as easy as possible for the public to understand and have some nexus of connectivity with the issues did I get that right?

Mr. Mardfin: And there's a related issue, you know if somebody's on a cliff that would mean that they're never in the SMA but you'd have some minimum amount which would be the highway but it could extend inward if it were at a low elevation.

Mr. Starr: And I know one other thing is that maybe dealing with point source and non point source pollution of the near shore waters, you know, that ties with the runoff. I don't know if nutrients and nitrogen rich runoff is now considered a, you know, a pollutant but if it is one of the factors that destroying the reef perhaps it should be and perhaps a mechanism of filtering it or controlling how that ends up in the waters could be something to look at. Commissioner Wakida.

Ms. Wakida: While we're looking at all these rules, I'm wondering if we need to reexamine our enforcement and how these rules are enforced and I don't know if this is in the jurisdiction of this group but whether or not there's a watchdog agency so once a rule is made, how is it being maintained?

Mr. Starr: Good issue and I think this should be part of the report back to us and maybe there's some way we can help with this. What else you got Jim?

Mr. Buika: I think I got through six. Okay this was brought up I think as a strategy number seven, identify and protect important shoreline areas. I think Andy brought up or Chip brought up the issues of there may be some areas that we just armor, but there are also some areas that we dedicate to protection. Again, this goes to the issue of beach nourishment, having sand to do that. The project that Tara brought up ran out of sand. It would have been successful if we had sand I'm sure. So that's another one. I think we do have a Beach Management Plan, I think we have some resources, I think we have many experts who understand the shoreline and we could potentially put some strategies together in that direction also.

And then again we had brought this one up, this is number eight is review the exemption categories under the Coastal Zone Management Law. Again, I think that's under the CZM State Law.

And then number nine was a repeat one I just had and this gets into probably I think why I repeated it is because again we deal with this is identifying and protecting important shoreline areas. Part of it is state jurisdiction, part of it is county jurisdiction and how do we manage that more efficiently, more realistically are there ways of doing that. I think that's a valid.

I think I had one more, oh and then just I threw this out here, how to further protect the coral reefs. I had a great idea for that I jotted it down but I can't find it right now, but I mean, that's the million-dollar question, right. That's our main client trying to protect, I mean obviously the waters and reefs are critical and it goes to the runoff issue.

Mr. Starr: When it comes back we can put it in the parking lot. One other thing I wanted to add is perhaps a mechanism for interaction with the update of the county's drainage code update. I don't know if it's that's Title 16 or - Title 15. And Mr. Giroux has, you got something for us Jim?

Mr. Giroux: Ward was just asking me if the protection of reefs are in 205A, and I just told him that it's with our objectives, coastal ecosystems to protect them. And it's also within our policy coastal ecosystem to preserve and protect.

Mr. Starr: Okay, anyway we're running out of time here. We still gotta go back and finish the Exemption Report. If we want to do this perhaps someone would want to make a motion that we have them start looking at the feasibility of doing this and report back to us when they're ready.

Mr. Freitas: So move.

Mr. Starr: Is there a second?

Mr. Shibuya: I'll second.

Mr. Starr: So moved by Commissioner Freitas, seconded by Commissioner Shibuya. You want to -

Ms. Cua: For the department basically go back and recap what's happened and come up with like a starting point list for the commission to consider in moving forward in this matter.

Mr. Starr: And to work on the feasibility of updating rules and ...(inaudible)... Commissioner Mardfin.

Mr. Mardfin: I have a question. Do we have the resources to - ICAP suggested that we get together and have them help us, but she said it would - Zena said it would take resources. Do we have resources?

Mr. Starr: The discussion that we've had so far is that the county is not going to be able to put up funding for this. We're looking for help. We know that there is some federal money out there and some other grant sources. So we're trying to do this without having to go and dig into the county budget for it and if that's part of our basis for doing that. Commissioner Freitas.

Mr. Freitas: Yeah would we have outside help on this to come up with these rules like an advisory group, maybe people from the public?

Mr. Starr: I think that when we - you know when we get some areas I think that would be a good thing to do. I'd rather just kind of get the ball rolling today and then when it comes back to us then we can try to create something. I mean, it's a good idea, but lets put that in the list to have a - to have a working group. You know, I don't know whether we need to do a formal thing that needs Sunshine Law; we just can an ad hoc group of people who want to join in. Anything else members? Okay, lets vote. All in favor please raise your hand. All opposed.

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

**VOTED: That the Department Come Up With a Starting Point List for the Commission to Consider in Moving Forward in This Matter and to Look at the Feasibility of Updating the Rules in These Areas.
(Assenting - J. Freitas, W. Shibuya, O. Tagorda, W. Mardfin, L. Sablas, P. Wakida)
(Excused - K. Hiranaga, D. Domingo)**

Ms. Cua: Six ayes.

Mr. Starr: Yeah, unanimous. I think that we've done - we've begun the process that may lead to something really, really great and I want to thank everyone who's participated in moving us down this road and especially Jim Buika who really is putting his heart and soul into finding ways we can do our job the best we can.

Mr. Buika: And I must give credit to my sidekick Tara Owens who helped coordinate all the scientists being here and thank you for everyone from off island for being here. We really appreciated your help. Thank you.

Mr. Starr: And I want a hand for all the people who presented and especially those folks who flew over.

Mr. Buika: Thank you very much.

Mr. Starr: Okay, thank you very much. We're still - had one piece of business we had not finished.
Ms. Cua.

- 3. EA/EIS Report**
- 4. SMA Minor Permit Report**
- 5. SMA Exemptions Report**

Ms. Cua: Yes Mr. Chair, we're back to the report that the department puts forth for the commission, there were three questions so I did pool some of the staff and we looked into these issues. So the first was on page one of one on the approved SMA exempt project list and the first question was on SM5 2010/0201, the Bean residence and the permit name is indicated as main dwelling/garage. This project was located in or is located in Kihei on Walina Street. It is not a shoreline property. It consisted of a new single-family dwelling of over - 2,700 square feet, a garage of over 700 square feet and a lanai of 419 square feet.

Mr. Starr: Okay, no concern for me.

Ms. Cua: The second is SMA 5, 2010/0207, Anna is here, she's the planner on that one and this is the Mau County Department of Parks and Recreation and she's indicated, she has that permit on her desk and that's not completed yet so there seems to be an error of this. Anna did you want to add to that?

Ms. Anna Benesovska: No, that's correct.

Mr. Starr: It's premature, what is it just out of curiosity?

Ms. Benesovska: Various improvements for accessibility purposed and put in for us by Parks and Recreation development and in Specifically in Kihei, park, beach parks. I have not processed the permit yet.

Mr. Starr: Okay, be curious to know which parts when it comes along.

Ms. Benesovska: Okay.

Ms. Cua: The last one is actually one where Jim Buika today, this is his permit and it's on your open assignments page 2 of 8, SMA Assessment lit, SMX 2008/00293 and this is for demolition of a home in Kahului. According to Jim it's a very old structure, under disrepair. It needed to be demolished and Jim you want to that?

Mr. Buika: Yes, I think it is completed and may just show as open. I'll check on it but it's an A&B property down on the shoreline in Kahului right next to Hale Nanea, next to the oil, the gas oil tanks there. The next property over there's just an old decrepit shack that they wanted to remove for

purposes of health and safety. So they're not building anything, it was a demolition permit and I believe that it's just not closed out through our permit system at this point.

Mr. Starr: Commissioner Shibuya.

Mr. Shibuya: I was more interested in why was this taking so long because it's dated 2008.

Mr. Buika: What I'm saying is it was completed a long time ago; it just wasn't closed out on our KIVA system. I had to prepare for all day today so I didn't get to close it out on our KIVA system. No I'm just kidding.

Mr. Starr: The house is gone but the paper ...(inaudible)...

Mr. Buika: Yeah, I'll close it out. Sorry.

Mr. Freitas: The Hale Nanea house is still there.

Mr. Buika: Oh yes, no it's the property next to it across the fence line towards the north shore. There was an old - There was an older, still is an old decrepit, abandoned home on an A&B property there, that was - they wanted to demolish. It had homeless; they were worried about safety, liability issues.

Mr. Starr: Okay, can we have a motion that all these items on these reports have been, we have no hold on any of them, they've all be accepted.

Mr. Mardfin: So move.

Mr. Shibuya: Second.

Mr. Starr: Moved by Commissioner Mardfin, seconded by Commissioner Shibuya. I mean we're not approving it, we're just -

Ms. Cua: Yes, basically that no further information is needed to pass these reports on and from the department's standpoint we really want to thank you for allowing us to handle this at a meeting level. You know with our furlough days we need to work smarter as I mentioned and if we at every meeting could deal with this maybe some time in the morning, you give me your red alerts, I'll check it out with my staff during the day and by the end of the day we get a report and we can move this on without having to generate a separate report to you. The department would really appreciate it.

It was moved by Mr. Mardfin, seconded by Mr. Shibuya,

**VOTED: That No Further Information is Needed for the Applications for Which
Additional Information was Requested.
(Assenting - W. Mardfin, W. Shibuya, J. Freitas, O. Tagorda, L. Sablas,
P. Wakida)
(Excused - K. Hiranaga, D. Domingo)**

Mr. Starr: Okay, thank you very much and with three minutes left to spare thank you and congratulations everyone. This meeting is adjourned.

I. NEXT MEETING DATE: August 10, 2010

J. ADJOURNMENT

The meeting was adjourned at 4:57 p.m.

Submitted by,

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

RECORD OF ATTENDANCE

Present

Jonathan Starr, Chairperson
Donna Domingo (excused at 12:08 p.m.)
Jack Freitas (in attendance at 9:11 a.m.)
Kent Hiranaga (excused at 12:08 p.m.)
Ward Mardfin
Lori Sablas
Warren Shibuya
Orlando Tagorda
Penny Wakida

Others

Ann Cua, Planning Department
Clayton Yoshida, Planning Department (Afternoon session)
James Giroux, Department of the Corporation Counsel
Mike Miyamoto, Department of Public Works