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3 **MAUI PLANNING COMMISSION**  
4 **REGULAR MINUTES**  
5 **MARCH 27, 2018**  
6

7 **A. CALL TO ORDER**  
8

9 The regular meeting of the Maui Planning Commission was called to order by Chairperson  
10 Sandy Duvauchelle at approximately 9:03 a.m., Tuesday, March 27, 2018, Planning Conference  
11 Room, First Floor, Kalana Pakui Building, 250 South High Street, Wailuku, Maui.  
12

13 A quorum of the Commission was present. (See Record of Attendance.)  
14

15 Ms. Sandra Duvauchelle: Okay, we'll try not to be teary today. Good morning. Maui County  
16 Planning Commission, March 27<sup>th</sup>, 2018 is now in session and this is my last meeting. So I  
17 want to thank everyone around me, Commissioners, the gentleman from Akaku, Carolyn,  
18 Director, Corp Counsel and all of my fellow Commissioners. Anyway we'll move forward.  
19 Director.  
20  
21

22 **B. PUBLIC TESTIMONY - Public testimony will be taken when each agenda item is**  
23 **discussed. Testimony will be limited to a maximum of three (3) minutes.**  
24

25 **C. RESOLUTION THANKING OUTGOING MEMBER SANDRA DUVAUCHELLE**  
26 **(Chairperson)**  
27

28 Mr. William Spence: Thank you Madame Chair. And the first order of business of course is the  
29 resolution thanking you for your service.  
30

31 Ms. Duvauchelle: It's been a fast five years.  
32

33 Mr. Spence: It's been five years. Yeah, I know it doesn't seem very long.  
34

35 WHEREAS, The Maui County Planning Commission was established in 1958;  
36 and  
37

38 WHEREAS, since April 2013, Sandra Duvauchelle has served as a member of  
39 the Maui Planning Commission; and has served as Vice-Chairperson of the  
40 Maui Planning Commission from August 2016 to March 2017; and the  
41 Chairperson of the Maui Planning Commission from April 2017 to March 2018;  
42 and  
43

44 WHEREAS, Sandra Duvauchelle has served the Maui Planning Commission  
45 with dedication and provided valuable guidance in serving the needs of the  
46 people of Maui County; and  
47

48 WHEREAS, Sandra Duvauchelle's term of office will expire on March 31, 2018,  
49 now therefore  
50

51 BE IT RESOLVED, by the Maui Planning Commission that it does hereby

1 express its deepest gratitude and appreciation to Sandra Duvauchelle for her  
2 service during the past five years and does hereby extend its best wishes in her  
3 future endeavors; and

4  
5 BE IT FURTHER RESOLVED, that copies of this resolution be transmitted to the  
6 Honorable Alan M. Arakawa, Mayor of the County of Maui and the Honorable  
7 Mike White, Chairperson of the Maui County Council.

8  
9 Ms. Duvauchelle: Thank you. Thank you very much. It's been I think the first two years I didn't  
10 say a word. I can't even begin to imagine how frustrating that was for the Chair and for the Corp  
11 Counsel. But it's been a great education and a great honor to be here. Thanks.

12  
13  
14 **D. NEW BUSINESS**

- 15  
16 1. **MR. CHRISTOPHER ONDATJE** requesting comments on the Draft  
17 Environmental Assessment (DEA) prepared in support of the proposed  
18 266 Dickenson Street 8-unit apartment building project and related  
19 improvements at 266 Dickenson Street, TMK: (2) 4-6-011: 011 and 028,  
20 Lahaina, Island of Maui. (EA 2018/0002) (CIZ 2018/0002) (SM1 2018/0002)  
21 (P. Fasi)

22  
23 The proposed action is located within the National Historic Landmark  
24 District which triggers the preparation and processing of an EA pursuant to  
25 the provisions of Chapter 343, Hawaii Revised Statutes.

26  
27 The Planning Department is the accepting authority.

28  
29 The Applicant has also submitted applications for a zoning change and a  
30 Special Management Area Use Permit. The public hearing on these  
31 applications will be scheduled after the Applicant has completed the  
32 Chapter 343 HRS process.

33  
34 The Planning Department is requesting the following:

- 35  
36 a. **Concurrence by the Commission on the filing of the Draft EA and**  
37 **Anticipated Finding of No Significant Impact (FONSI) determination**  
38 **with OEQC for Final EA publication.**  
39  
40 b. **Comments from the Commission on the Draft EA.**

41  
42 Mr. Spence: Thank you. It's been fun working with you. Commissioners you're -- oh, we're all  
43 the way down to No. D on your agenda. New business, Mr. Christopher -- and I am going to let  
44 you pronounce your name.

45  
46 Mr. Christopher Ondatje: Ondatje.  
47

1 Mr. Spence: Ondatje. Requesting comments on a draft environmental assessment prepared in  
2 support of the proposed 266 Dickenson Street eight-unit apartment building project in Lahaina,  
3 Maui. Our staff planner this morning is Mr. Paul Fasi.  
4

5 Mr. Paul Fasi: Good morning Commissioners, members of the public. So today the Department  
6 is requesting concurrence by the Commission on the filing of a Draft EA, and the anticipating --  
7 and the anticipated Finding of No Significant Impact (FONSI) with the OEQC for Final EA  
8 publication. Publication date were from March 8<sup>th</sup>, 2018. The 30-day public comment period  
9 will end April 9<sup>th</sup>, 2018.

10  
11 The second item that we are requesting from you today is the applicant is requesting comments  
12 from the Maui Planning Commission on the Draft EA that you have and was passed out at your  
13 previous meeting. Everyone brought their copy.  
14

15 I'm going to go over the regulatory rules and the owner has their representative here, Mr. Rory  
16 Frampton. He will go over the specifics of the project.  
17

18 So today we have before us a Change in Zoning from D2 Duplex and R2 Residential to A2  
19 Apartment. This is necessary to have apartment zoning in the A2 Apartment District which  
20 current zoning does not allow. The EA is required but because the parcel is in the National  
21 Historic Landmark District. The current zoning is State is Urban, County is D2 Duplex and R2  
22 Residential; the Community Plan is Multi-Family; the Maui Island Plan it is in the Urban Growth  
23 Boundary. It is in the SMA, and as mentioned previously it's in the National Historical Landmark  
24 District.  
25

26 Again the OEQC publication dates for public comment was March 8<sup>th</sup> to April 9<sup>th</sup>. To date no  
27 comments have been made or received by the Department from the public. As far as agency  
28 comments, we did receive comments from the State Department of Health, the State DOT, the  
29 State Department of Health, and the County Department of Water. All standard comments.  
30 There was nothing substantive that they submitted. So in total it was transmitted to eight State  
31 and County agencies. Again, there were no substantive comments made.  
32

33 The Department is anticipating a FONSI. The project must come back to the Planning  
34 Commission to process the recommendation to Council for the Change in Zoning. And once  
35 more it will be back before this Commission to process the SM1 after the Change in Zoning is  
36 returned from the Council. So there's still a ways to go. So today we're just requesting  
37 comments on the Draft EA. If there are no further -- if there aren't any questions I will turn it  
38 over to Rory and he'll give you a presentation on the project. Thank you.  
39

40 Ms. Duvauchelle: Thank you. We'll hold public testimony after Mr. Frampton's presentation.  
41

42 Mr. Rory Frampton: Thank you and good morning Commissioners, and thank you Chair for your  
43 five years of service.  
44

45 Ms. Duvauchelle: Thank you.  
46

47 Mr. Frampton: It did go by really quickly.

1  
2 Ms. Duvauchelle: It did didn't it?

3  
4 Mr. Frampton: It seems like you were just appointed. I think I'm getting old. Anyways I'm Rory  
5 Frampton. I'm the consultant for Chris Ondatje. And I'm here to discuss the 266 Dickenson  
6 Street apartments. As you --. It's an eight-unit apartment building with seven two-bedroom  
7 units and one single-bedroom unit. There would be four units on the first floor, three on the  
8 second floor, and one unit on the third floor. There's going to be two parking stalls per unit for a  
9 total of 16. It will be grass crete along the four stalls abutting the road kind of softening the  
10 appearance. And one of the main goals of the applicant is to build a safe building for rentals for  
11 workers in Lahaina. He really is stresses the importance of safety. It will have fire sprinklers,  
12 perimeter fencing, outdoor lighting and the like, and of course it's walking distance from the  
13 Lahaina Commercial Center, an employment hub.

14  
15 The required permits that Paul talked about. Because it's within the National Historical District,  
16 it triggers the need for this Environmental Assessment, and that's why we're today is to get  
17 comments on the Environmental Assessment. It's also within the Special Management Area so  
18 we will be coming back to you to request a consideration of the SM1 or SMA Major Permit.

19  
20 It's also currently zoning Duplex and R2, and we're asking for it to be changed to A2 Apartment.  
21 And I will go into a little bit of background here on the zoning because when the applicant  
22 purchased this property he was under the belief that it was zoned Apartment. In 2013, the  
23 seller's real estate agent went in and got this form and it's hard to see but that area right there  
24 the County zone, they confirmed that it was A2 Apartment District zoning. So while he was in  
25 due diligence his own realtor went in and got the form, got it re-confirmed in 2016 and it said A2  
26 Apartment District zoning. So he has two forms. He thought he was buying an Apartment  
27 zoned property. After he bought it a couple of months later he was informed that these forms  
28 were in error and in actuality it was Duplex. And historically on the maps they used to show  
29 Duplex as A2 and it was confusing but it would say A2 Duplex. And so when the planners  
30 looked at it they just saw the A2. And to just give you an idea of what the planners have to deal  
31 with --. Well there's the form. I'm zooming it on where it says A2 Apartment. This is what the  
32 map looks like, and it's tattered. That's a small portion of a map that's about four-feet long.  
33 This is the parcel right there, and you can see it says A2, but there's a little word over there  
34 where it also says Duplex. Well the planners only looked at the A2. They told him it was  
35 Apartment. He paid for it as an Apartment zoned project. He was informed later on that it was  
36 Duplex. We went and met with Planning. Planning felt very horrible about it. No one wanted a  
37 lawsuit. What we said is fine. We sat down and we figured out the best course of action was  
38 actually just to move ahead, have the applicant go for a Change in Zoning concurrently with the  
39 SMA. That's what we're doing. In fact the Department has been very helpful in trying to  
40 expedite things and move it along so we're appreciative of that. I just wanted to give you that  
41 background because some people might say what, what justifies you going to Apartment on this  
42 smaller lot? Well, he thought it was Apartment when he bought it. And historically it's been in  
43 the Community Plan for multi-family use for years. So thank you for letting me explain that.

44  
45 So the objective and need is of course safe, convenient, clean and reliable place for people to  
46 live in Lahaina Town. That's the client's main objectives. And of course we know the housing  
47 market in Lahaina is really tight. And it's the commercial hub and lot of people commute to

1 West Maui daily, so to put more units in the center of Lahaina Town is -- makes a lot of sense.  
2 It's supported in the Community Plan, and it's supported by the Maui Island Plan.

3  
4 The timeline, right now as Paul mentioned we're in the 30-day review period for the EA. Today  
5 we're getting comments from you guys on the Draft EA. We're going to be at the Urban Design  
6 Review Board next week. We're hoping that after we get all the comments the Planning  
7 Director will accept the Final EA and the FONSI. And then we will come back to you guys for a  
8 public hearing, a combined hearing for the SMA and the Change in Zoning. It will be a  
9 combined public hearing with notices that goes out and everything. And then you'll make a  
10 recommendation to the Council on the Change in Zoning. That will go up to Council. The SMA  
11 will be deferred and it will sit here. Technically it will sit here in this body. It will go up to  
12 Council. Review the Change in Zoning. Hopefully get that approve. And then it come back to  
13 you guys for the SMA Permit. Because you can't issue the SMA until the zoning is in place.  
14 And hopefully we'll begin construction six to nine months after the SMA is approved. After we  
15 move along a fair amount of applicant is going to try to do some concurrent processing of his  
16 construction plans but we don't want to do that until we've flushed out the potential issues and  
17 concerns.

18  
19 So again this, this -- obviously it's in downtown Lahaina. This shows the location of the project  
20 just mauka of the Lahaina Harbor and on the corner of Dickenson and right near the  
21 Lahainaluna residential corridor that goes mauka. The surrounding uses -- the parcel up here at  
22 the corner. You've got Sacred Hearts School right across the street. You've got the Aina Nalu  
23 Vacation condos in the backyard basically. Weinberg Court Apartments and the rest of the  
24 Lahaina Town's urban core with Dickenson Street running down to Front Street. And it's just a  
25 couple of blocks away from Front Street. This is a zoom in of the project. It's a corner property  
26 that is right along Lahaina -- I mean, Honoapiilani Highway. And I will be taking about  
27 circulation. Dickenson Street is very narrow. And we do have comments from our traffic  
28 consultant as well as the Police Department that we'll touch on a little bit.

29  
30 Historically this was actually in sugarcane. This is a 1949 aerial photo showing the area in  
31 sugarcane use. Later, this is a 1960, it was developed into residential property and it served -- it  
32 had residential homes on it for I don't know 56 years, and then they got old and there were  
33 demolished. Presently the land is vacant.

34  
35 So this is the State Urban District. It's right in the Urban District. This is the Community Plan.  
36 It's kind of hard to see, but it's right there, and it's a strip of land that's multi-family. Behind it is  
37 Hotel. Across the street is Public/Quasi-Public. There's businesses in the area. Multi-family  
38 further down up towards Shaw Street. And businesses, of course, all through Lanai town. This  
39 is the Urban Growth Boundary for Lahaina. It's with the Urban Growth Boundary. The Special  
40 Management Area runs along the highway so it's everything makai of the highway is in the  
41 SMA.

42  
43 This is the Lahaina District maps, and these are the historic district in terms of the zoning. And  
44 it's a little hard to see, but there's a historic district zoning across the street, and there's also a  
45 historic district zoning all along Front Street. But the property is not within the historic district  
46 zoning category.

1 This is kind of a panorama from the corner of Dickenson, looking at the property. It's a vacant,  
2 10,000 square foot property. This is looking down Dickenson towards Front Street, and that's  
3 the highway that has sidewalks on it. This is looking mauka at the corner of the property looking  
4 towards the highway, and it's basically a vacant property right now. That's another view across  
5 the property just showing the status before that rains came when it was really dry.

6  
7 So here's a perspective of the project. Three-stories in one portion, two-stories on the side  
8 closest to the highway with four units on the bottom, three units on the second story, and one  
9 unit on the top. The site plan has been engineered. There's subsurface drainage and we spent  
10 a lot of time meeting and discussing with Department of Public Works the roadway  
11 improvements because Dickenson Street is so small. But we were able to get enough space for  
12 travel lanes and get sidewalks in there so there is going to be sidewalks fronting, fronting the  
13 project and it will connect to the sidewalk that runs along the highway. And there will be enough  
14 space for two lanes to go back and forth. And like I said we did work out an agreement with  
15 Public Works on those improvement requirements.

16  
17 This is a site plan and I'll zoom it in. So here are the stalls. The grass crete stalls in the front.  
18 You'll enter the project and there will be 16 stalls. And there will be perimeter planting around  
19 the project.

20  
21 First floor, that's hard to see, but there's four units there. Three units with the lanai, for one of  
22 the units on the second floor and the third floor just one unit.

23  
24 So here's a more of a detailed elevation looking at it from the front and from mauka. This is it  
25 from the back. All the ground floor units will have lanais and they can walk out to the grass  
26 area. The second and third floor units will have lanais as well.

27  
28 So the Draft EA of course we looked at all the impacts on the environment from you know  
29 natural, physical, social and cultural perspectives. We pre-consulted with agencies and the  
30 community. Chris has been --. His kids went to Sacred Hearts. He's very close. He's always  
31 helped them with their bazaars and he's had a good relationship with them. And Mariah who I  
32 should have introduced earlier. Mariah Gills helps me out on the consulting side. She went  
33 there and they both met with the people at Sacred Hearts. We've reached out to the various  
34 community organizations in West Maui and sent notices to all the neighbors.

35  
36 We did get comments back on the pre-consultation from the Police Department. And, and I'm  
37 going to get into that in just a little bit. But as Paul said that there were no major comments on  
38 the Draft EA as of yet. But we did get comments from the Police Department and they basically  
39 concur with our approach to addressing the traffic. In that EA there's an engineering and  
40 drainage report, traffic impact analysis, cultural impact assessment, and an analysis of planning  
41 and land use policies and controls.

42  
43 I mentioned the Maui Island Plan that supports a mix of housing types, and within walking  
44 distance for work, work places. And basically this policy down here says ensure higher density  
45 compact urban community's infill and redevelopment of underutilized urban lots within the Urban  
46 Growth Boundaries. And that's exactly what we're doing here.

1 In the West Maui Community Plan which was adopted in 1996 for specifically for Lahaina Town  
2 it says concentrate multi-family dwelling units around central commercial district on the following  
3 locations. Towards the south end of Lahaina Town along Waivee generally from Lahainaluna  
4 Road and to Shaw. And we're in that area and the map designated this as multi-family. So in  
5 the Draft EA we found that --. Because essentially it's an infill project supported --. It is  
6 supported by available infrastructure traffic mitigation. So there was concern that it's so close to  
7 the highway when you're coming -- if you were coming off the highway and wanted to turn left  
8 you could potentially have a queuing behind you. People could stack up and go into the  
9 highway. That wouldn't be good so our consultant has recommended that there would be no  
10 left turns into the project from that approach. And the Police Department agreed with that and  
11 they also said -- excuse me -- there shouldn't be left turns coming out of the project. And  
12 because that could --. Same thing, there's not a lot of site distance, people are coming in and  
13 off the highway pretty quickly. So the applicant agrees and there won't be left turns into or out  
14 of the project. There's plenty of streets in that area where you can approach the project by, you  
15 know, going down either Lahainaluna or Prison, and coming up Dickenson and using Waivee.  
16 So there's plenty for circulation in the town to not really have an impact on prohibiting the left  
17 turn lanes. And it's so close. And you know the objective is to have people that are living and  
18 working in Lahaina Town. So you know it's very likely that a lot of these people won't be driving  
19 for a lot of their short trips. They can either walk or bike for their short trips.

20  
21 There's no sensitive, unique or natural, cultural -- natural, historical or cultural resources on the  
22 property. It's strongly supported by the Community Plan and the Island Plan. And we were  
23 anticipating at Finding of No Significant Impact.

24  
25 That's the end of my slide show. The applicant is here if there are any questions, and we can I  
26 believe -- oh, I think there's public testimony.

27  
28 Ms. Sandra Duvauchelle: Yeah. Thank you Rory. We'll take public testimony and then we'll  
29 have questions from the Commissioners. All right so at this time we'd like to open the floor for  
30 public testimony. Anybody wishing to testify please come forward. Good morning. Please  
31 state your name and you'll have three minutes.

32  
33 Ms. Patricia Nishiyama: Aloha Kakahiaka.

34  
35 Mr. Robinson: Aloha.

36  
37 Ms. Nishiyama: Aloha. My name is Patricia Nishiyama, aka Auntie Patty Nishiyama, aka Tutu  
38 Patty. I represent Na Kupuna o Maui. The kupuna has been reading the draft environmental  
39 assessment for the eight-unit project on Dickenson Street. We have major questions. We were  
40 not able to find any correspondence from Lahaina Police Department regarding their favor or  
41 disfavor with this project. Do you have that available for us to read? The documents read the  
42 roadway is relatively narrow with no shoulder space fronting the project. What are the current  
43 Maui County Code requirements regarding the width of the road especially in regards to the  
44 roadway to next to a school and church?

45  
46 I used to live in that area when I was little. My aunt married an Arcangel boy so I went to  
47 Sacred Hearts School so I crossed right there you know. But at that time we didn't have any

1 traffic, yeah, you know. I mean anyway. So when you turn into Dickenson at this intersection  
2 heading towards the ocean everybody knows how tight it is next to the rock wall. Na Kupuna  
3 invites you to make that turn. It's dangerous no matter what the traffic is or not. Has this matter  
4 been addressed in the Draft EA? We would be pleased to know how the developer plans to  
5 mitigate this problem. There was a young girl who was killed in that crosswalk over there. And  
6 it was very tragic to the family and our community because I knew this little girl. So is this  
7 matter addressed in the EA? We want to know how the intersection will be improved to make it  
8 safe as a crosswalk for the ages of children going to school. Will the sidewalks be installed?  
9 What will be proposed rental cost per unit? What is the proposed square footage of each unit?  
10 Is it going to be low income? Anyway.

11  
12 Na Kupuna O Maui would like the answers to these questions and others that arise before the  
13 Final EA is approved. This development as proposed is not good in this location. Not safe at all  
14 for our children. Mahalo.

15  
16 Ms. Duvauchelle: Thank you. Commissioners, any questions for the testifier? Commissioner  
17 Robinson?

18  
19 Mr. Keaka Robinson: Just one comment. Good questions and I'm sure they'll get back to you.

20  
21 Ms. Nishiyama: Yeah because we read it and we didn't see the report from the Police  
22 Department and all that you know. And that no left turn, where is everybody going to go to  
23 Sacred Heart School from down that end all the way from Puamana, are they going to use  
24 Wainee? Oh, my god, you know.

25  
26 Mr. Robinson: Good questions, and I know Mr. Frampton will get --

27  
28 Ms. Nishiyama: I mean, I've seen everything. I've lived it. Thank you. Mahalo.

29  
30 Ms. Duvauchelle: Thank you. Commissioner Kahu Hill.

31  
32 Kahu Alalani Hill: Aloha kakahiaka.

33  
34 Ms. Nishiyama: Aloha.

35  
36 Kahu Hill: I wonder since you lived there and you were raised there and just knowing the history  
37 about those corridors in Lahaina historic district as far as where this is proposed. And good  
38 questions.

39  
40 Ms. Nishiyama: Yeah. Well today that whole Lahaina is historic, National Historic Number One.  
41 I think that's what they are saying about Lahaina, yeah. And well that whole area had only  
42 homes before you know. Then here comes the hopes, the apartments, a hotel, Aina Nalu.  
43 Before that it was they came us to support it for low income apartments for our people. So all  
44 the low income people went and applied and they lived in that apartments. Down the road they  
45 were all kicked out and they were turned into a hotel. I mean they always do this to us in  
46 Lahaina. No matter . . . (inaudible) . . . Kau Hale, the shelter over there, and that place over  
47 there, they say it's for our community yeah, but every Tom, Dick and Harry is over there. And



1 where is our people? Homeless yeah. Okay. But I think you better look into that historic  
2 cultural preservation number one. Take a look at that because it's getting very strong now with  
3 the State Department okay.

4  
5 Ms. Duvauchelle: Commissioner Castro?

6  
7 Mr. Stephen Castro: Thank you Patty. My children also went to Sacred Hearts and we're  
8 friends with the Arcangel family. In fact he used to take my babies over there to get lomi, you  
9 know. But, and I remember the, I think, the school bazaar when that young girls got hit by the  
10 cars. And that left turn coming -- left and right coming in that road is very narrow.

11  
12 Ms. Nishiyama: Yeah because my god you got to squeeze in there and slowly so you don't even  
13 whack the wall yeah.

14  
15 Mr. Castro: Yeah, I have a truck so I go to visit the cemetery over there. My in laws are buried  
16 over there so every time I make that turn it's like it's so narrow.

17  
18 Ms. Nishiyama: I know. It is. Exactly.

19  
20 Mr. Castro: You have really good questions.

21  
22 Ms. Nishiyama: Oh, yes, thank you.

23  
24 Mr. Castro: Thank you.

25  
26 Ms. Duvauchelle: Commissioner Higashi?

27  
28 Mr. Richard Higashi: I'm concerned about the traffic in that area from the stand point of  
29 pedestrian. I think they took care of the motor vehicle situation. When you were growing up in  
30 Dickenson Street how did --? There's no sidewalk there, right?

31  
32 Ms. Nishiyama: No, nothing. We had that wall forever and ever.

33  
34 Mr. Higashi: So how did you get to Sacred Hearts from where you lived without a sidewalk?

35  
36 Ms. Nishiyama: We just cross the street because there were hardly any cars, yeah, so we just  
37 crossed the street. We make sure you look one side and the other. Yeah. So and at that time  
38 not very many children went to Sacred Hearts School. But today, yes, absolutely.

39  
40 Mr. Higashi: Well the reason why I asked also is that that used to be cane field before and then  
41 it became residential.

42  
43 Ms. Nishiyama: Yes.

44  
45 Mr. Higashi: So before this block was cleared there were homes there.

46  
47 Ms. Nishiyama: Yes, absolutely.

1  
2 Mr. Higashi: So those people there I don't know . . . (inaudible) . . .

3  
4 Ms. Nishiyama: The Arcangel they had a house and they had a cottage. And then there were  
5 other people living down. The Villalon family, yeah. All them. Yeah. It was all homes.

6  
7 Mr. Higashi: So your concern right now is that because of the growing population or the traffic  
8 that it becomes unsafe to have any kind of a facility that . . . (inaudible) . . .

9  
10 Ms. Nishiyama: Exactly. Correct. Correct. Yes.

11  
12 Mr. Higashi: Thank you.

13  
14 Ms. Nishiyama: At that time when we were growing up it was safe. Today, it's not. We have  
15 millions of cars in Lahaina.

16  
17 Ms. Duvauchelle: Okay, thank you. Any other questions? Thank you very much.

18  
19 Ms. Nishiyama: Mahalo.

20  
21 Ms. Duvauchelle: Anyone else wishing to testify please come forward. Okay seeing none, we  
22 will close public testimony and have questions from the Commissioners. Commissioner  
23 Carnicelli.

24  
25 Mr. Lawrence Carnicelli: Thank you Chair. Rory I just want to be able to give you the  
26 opportunity to answer Aunty Patty's questions because I think as everyone said I mean they are  
27 good questions and so I think if you could please address them.

28  
29 Mr. Frampton: Yeah, they're really good questions. You know in terms of the traffic like I said  
30 we did have a consultant look at both the numbers of cars coming in and out, but really more  
31 you know the safety aspects. And that's why, one, for in terms of the cars like I mentioned it's  
32 just left -- it's not prohibiting left turns at the intersection. It's just into and out of the project. So  
33 the project people could only come into the project by coming up Dickenson and turning right, or  
34 leaving the project and turning right. That's how they would get in or out of the project.

35  
36 When we sat down and worked -- sat down with Public Works, of course, the main concern was  
37 the safety and vehicle movement on that roadway. So where we situated the sidewalk --. Well  
38 first we put in the sidewalk so there's a sidewalk running along the entire front of the property so  
39 the pedestrians fronting this property would be safe. And then there is a little bit of a widening  
40 of the road. Not much because of the size of the property and looking at what the needs would  
41 be going down makai on the other properties which of course aren't owned by the applicant. So  
42 that was a major concern. And the Police Department, there is a letter in the, in here, in our  
43 consultation. The Police Department looked at it. They thought about obviously and their  
44 recommendations were not having the left turns just like what we're proposing. I think most of  
45 Aunty Patty's concerns centered around the safety for the pedestrian and for the cars.

46  
47 The Historic District One, I just wanted to clarify, there's two types of historic district

1 designations. One is for the national landmark district and that's what we're here for, and it's  
2 basically the whole town of Lahaina is in the historic landmark district. The Historic District One  
3 is actually referring to the zoning and that's the map that I showed you that focuses on Front  
4 Street and it includes Sacred Heart but this property is not part of that Historic District Number  
5 One.

6  
7 You know what I'm going to ask the applicant to come up and introduce himself to just make a  
8 brief statement about his background in Lahaina, the purpose of the project, and he's got a lot of  
9 experience being at Sacred Hearts and the traffic and he's very much concerned about that so  
10 I'm going to let Mr. Ondatje to come up and speak a little. Thank you.

11  
12 Mr. Ondatje: Good morning Commissioners. Thank you so much for letting me come out and  
13 speak a little bit about it. My children also went to Sacred Hearts, and for many years I did the  
14 bazaar. I did the construction of the bazaar. And during this time of doing the bazaar, I also  
15 was using that driveway that's right across the street from my property at the cafeteria, to the  
16 backside of the cafeteria of Sacred Hearts. And so at that point I had already notice some  
17 challenges we have there so we definitely addressed it and looked towards being able to light it.  
18 A few things that changed since back in those days and that was that the corner now is much  
19 clearer and is more able to see what is happening there. So people turning back and forth with  
20 it. As far as coming off of the highway or going onto the highway that area now will be a lot more  
21 lit. And our areas are lit so we are doing we're doing that. We also addressed the, addressed  
22 everything by having the sidewalks in front and meeting with Public Works and so on and  
23 addressed all of that and tried my darnest.

24  
25 My biggest thing about this is for many years I'm a parent, a west side parent, and inevitably we  
26 know most of the -- we all know each other and we know all of our kids that are a few years  
27 above and below our children's age. And I know a lot of these young adults. And my concern is  
28 is looking around of what they're doing. My niece and a few of the other kids like Mariah, my  
29 concern was always that what they're renting and what they're able to get are very much old  
30 and in disrepair of places there. And then so inevitably we find our children are crossing that  
31 Pali at night. And most of them are restaurant workers or hospitality and it's after that night  
32 shift. And we all know nothing good happens on that Pali after 10 o'clock. And so my hope was  
33 it is kind of that Lahaina has been really good to me, and I also knew the Arcangels and so on,  
34 and I really want to give back a little bit. So my hope is that we can keep some of our kids, our  
35 west side kids on the west side, and give them a safe place that I know is hurricane strapped, I  
36 know it's fire sprinklered. Nothing is going to catch on fire. There's -- most of the floor are hard  
37 surface with throw rugs and stuffs like that. So I've done everything I could think of to make it  
38 better. And then we also have this thing that we're --. Some of our kids there's exodus because  
39 you can't find a good place to live. You can't -- it's the jobs are you know are, are a little scarce  
40 as well and so it's trying to help keep our community the way that it was. I mean I love Lahaina  
41 because we get to grow up there and be slow and enjoy the ocean and have our lives. And my  
42 hope is someday that we go to walking in Lahaina town area so we can reduce all these  
43 needless things. And as the traffic builds and so on, this was part of our conversation with  
44 Public Works and so on, so they are addressing these problems. And I believe that we've done  
45 everything that we could to, to kind of ensure the safety of that general area. But in that  
46 particular area I think just lighting alone and being able to have some control of it.

1 I do street striping and stuff as well. And so my plan was to be able to kind of slow down a little  
2 bit. As you come around the corner to realize that okay well you are here. And so Sacred  
3 Hearts and I have talked a lot about it and how we would plan for safety. On there, it's typically  
4 they're day to day everybody is in the parking lot and there's a particular crosswalk that is  
5 designated and there's a crossing guard and everything. It's what happens is sometimes  
6 somebody crossing the street where there really is no preparation for that. So what we did is  
7 we decided that maybe we would designate some striping. I was going to work with Public  
8 Works on that and try to help. But the bottom line is that we get the sidewalk and we bring the  
9 kids down away from the highway and over to Wainee Street then I think we have a better, a  
10 better chance at it.

11  
12 Some of the teachers from Sacred Hearts were very interested in, in, in staying there and living  
13 there. My hope is that eventually we become a little bit more bike friendly and that was part of  
14 it. And so the kids that are working, and I say kids and they're actually young adults, and  
15 they're working all up and down Front Street at the many restaurants and such, and that they  
16 could actually bike or walk to work. And it would then therefore help a lot. And like I said if we  
17 can keep, if we can keep two kids off of the Pali, I'd be really happy. It will reduce that statistic.  
18 That's something that I think would be a good thing.

19  
20 Ms. Duvauchelle: Thank you. Commissioners, questions? Commissioner Castro?

21  
22 Mr. Castro: Hi.

23  
24 Mr. Ondatje: Hi.

25  
26 Mr. Castro: I'm looking at picture no. 2. You have Honoapiilani Highway and, and right at that  
27 intersection you have the cafeteria. It's kind of a blind whether you're making a right turn  
28 coming from...on the opposite side. A right turn or a left turn, you've got to be quick to make  
29 that turn and when you make that turn it's so narrow. So my concern is this is where the young  
30 girl -- actually there were two kids that were hit and one died over here so I have a concern  
31 because there is no sidewalk, and granted you're going to put a sidewalk on your side. But the  
32 cafeteria that's loading and unloading it becomes a drop off.

33  
34 Mr. Ondatje: Yeah the gate is mostly closed. It's just in those times. Like what I used it for is to  
35 haul all the booths in and out from the storage, and so I understand all of that. There are, there  
36 is crosswalk now there, on that corner along the highway there and it's lit on one side. But I do -  
37 - my intent is to light our corner as well so it becomes a little bit. And then in talking, in  
38 conversation with the officers I had kind of pre-mentioned it to the Maui PD and they're findings  
39 were pretty much what I had wanted to do to begin with and that's to limit that, that, that flow  
40 there. And their biggest concern was the bulbbling up of the traffic from the highway. What  
41 happens when you turn off the highway we really can't see what's happening on that corner.  
42 And because it's narrow it goes from a highway to a narrow street as all of the streets are in  
43 Lahaina going down towards the ocean. I think what it did for me just eliminating anything plant  
44 life in that corner allowed you even before you make the turn coming off the highway right or left  
45 there's no obstructions. On the Sacred Hearts side they have their wall. Some of their walls are  
46 a little bit high to the corner, so I did talk to them about helping them maybe reducing that  
47 height. So when you're in your car and you're sitting down you can look to our property and see

1 the corner. You can see what's happening there on the corner. The building is set towards the  
2 back so what that did for us is kind of open up that area there to keep it low and down. And  
3 then that corner it's always looked a little bit bad for many years. And so we are planning on  
4 doing low lying landscape there and foliage around. And you see the crosswalk and you see  
5 the handicap ramp coming off of the sidewalk, when you get to this side there's a handicap  
6 ramp, but that's it. So in our sidewalk as you round the corner ours will also have two handicap  
7 ramps so it makes a little bit more user friendly for everybody. And then the thought process of  
8 maybe doing some stripping and some alert to it as it comes around, I think is important. We  
9 did by opening up and removing shrubs and stuff that may have blocked your view coming. If  
10 you're coming north on the highway and you're turning left onto Dickenson it definitely have a  
11 clear vision of the intersection.

12  
13 We also removed some plants over there with . . . (inaudible) . . . Sacred Hearts a little bit so  
14 that they're coming around their corner where the guard rail you see there in the photo. And so  
15 now that's reduced that elevation as well so now the things that we had in the past where that  
16 corner was kind of narrow just visually because by having the shrub and so on against it, it  
17 narrowed, it made it narrow. So having turn off that highway for many years to get to Sacred  
18 Hearts, I did notice all of that then and I always wanted to do something about it. And I'm just at  
19 that point of my life where I want to give back to the community and I want to help. So that is  
20 my intent is to try to keep our children safe and to clear as much as we can so that it looks  
21 clean, neat, and there's no visual obstruction.

22  
23 Ms. Duvauchelle: Thank you. Any other? Commissioner Higashi?

24  
25 Mr. Higashi: I have a question about the construction of your apartment.

26  
27 Mr. Ondatje: Yes.

28  
29 Mr. Higashi: I noticed it's three levels.

30  
31 Mr. Ondatje: Yes.

32  
33 Mr. Higashi: Because I looked at that --. Come back to the original. Yeah, that one there. You  
34 see that white house? That's your neighbor right?

35  
36 Mr. Ondatje: Yes.

37  
38 Mr. Higashi: Now as the level is what's the view building three levels for that person being able  
39 to see the mountain or you know a lot of people like to see the environment? Now with a three-  
40 story versus a two-story how does that affect that white house there?

41  
42 Mr. Ondatje: Okay that's a great question. So I want you to know that I've gone around and I've  
43 talked to those people. It was when Mr. Arcangel had passed away and then it turned out that  
44 we were in probate for a few years and I, I had gone around and spoke to a few of the  
45 neighbors and so on. So most of the houses that are there are duplexes or four-plexes right  
46 down in there. And all of them are 15 feet from the street. They're all set forward. If you  
47 noticed mine is set back so that I think I'm not interfering anybody's view with the mountain.

1 From their home they can still see from their kitchen window if they want to see the mountain  
2 absolutely it's, it's complete. And so what I did is I hoped to -- I don't want to affect anybody's  
3 property adversely at all. That is not my intent. So I did converse, and talk, and show, and line,  
4 and basically I staggered so my home is, is closer to the hotel side. Or the apartments are  
5 closer to the hotel side than to Dickenson Street. And what that did for them is gave everybody  
6 to maintain their view, but for me mostly besides that maintaining the view it was a two for  
7 because I also wanted to make sure that everything was away from that corner. Because I think  
8 that corner narrows itself. If you build close to the corner I think it narrows itself. And it's  
9 already narrow. So by adding the sidewalk and back setting it what it did is it gave us a clear  
10 visual of what's happening, and it promoted as far as the neighbors were concerned now  
11 anybody -- all of their homes are up front and that's in front of my parking area essentially so  
12 everything is low.

13  
14 Ms. Duvauchelle: Thank you. Commissioner Castro did you have a follow up question?

15  
16 Mr. Castro: Yes. Again my concern is safety. After the incident with the young girls that were  
17 hit they put in the signal lights. So my concern is children that are coming from up Lahainaluna  
18 Road or they with Malu Camp using that signal crosswalk over here, once you get across  
19 there's no crosswalk and they walk along the side and going to the cafeteria driveway. So I'm,  
20 for me, it's a real safety concern.

21  
22 Mr. Ondatje: Yeah. So what, what we had done a while ago, Sacred Hearts, we directed most  
23 of the traffic crossings and so on too. We found that it was a better control to, to control Wainee  
24 Street. So the children coming in, most of them if they're coming from that, they would walk  
25 down one of the streets. So a couple of streets up there is some sidewalks that go down. Our  
26 intent is to sidewalk and in talking with Planning their intent is down the road -- I'm sorry, not  
27 Planning, but Public Works -- their intent is to sidewalk continue down. So we, we worked with  
28 them. We established what we could do and how far to go. And I'm really, again, I really want  
29 to give back to the community so I'm willing to help in anyway with that sidewalk, to continue the  
30 sidewalk. Because I also, nothing is worth any child being injured for any reason. Nothing is  
31 worth that. So whatever I can do to help that along I'm absolutely willing to do.

32  
33 I'm a licensed general contractor and I do lots of work for Department of Transportation so I'm  
34 real familiar with sidewalks and you know lane traffic turnings and all those needs. And so,  
35 yeah, I've addressed everything that I could within reason for that. But my intent again is to  
36 provide safety and to have a well-lit area. It makes sense. If you're coming off of a road and it's  
37 a little dark everywhere and you turn onto a dark, onto a darker yet road that changes things,  
38 right? If you're a driver you're visually, you're not prepared for that. My intent is to light my  
39 parking area, to light the corner area which will also spill over with, you know, not obscene  
40 lighting. There's going to be solar and such like that, but just enough so you're lighting that  
41 corner. And I think 90% of our battle over there is that as you're coming off of the highway it's  
42 already we have some limited lighting along the highway. But as you turn down we've got  
43 nothing. And so my intent is to light that corner which will help us on that intersection. And  
44 that's the hope.

45  
46 So a few years ago, well several years ago now they determined that with Maui PD we had  
47 determined that we cannot -- nobody can enter Sacred Hearts from that side. That is supposed

1 to be a service entrance. So they were never intending for children to walk that way at all in any  
2 of the planning. And you know the church also wants to do anything that they can to help that  
3 situation. But that is the plan is that gate is supposed to be closed. That's why they have that  
4 sign posted. And there is no really crossing the street there.

5  
6 But for us as a parent if your child is crossing close to the highway intersection in a dark area  
7 that becomes more of a concern than you know a 150 foot away. It's a good football field away  
8 and if you cross even further, not that it's a good place to cross or anything like that, but at least  
9 you're pulling away from the traffic hub. And by having that section of the sidewalk there and  
10 then hopefully shortly my neighbors will begin to want to add that sidewalk down their path  
11 there. And so that's the hope is down the road it becomes more, more of a better situation. But  
12 either way I don't think they should be crossing the streets that are not designated for  
13 crosswalk. If you look at the way in the plan there's a, you know, a crosswalk at Wainee Street,  
14 the one on the highway here. But there's no crosswalk in between. And that's why the church  
15 has that wall all the way around it so there's really no access to the church property other than  
16 jumping the wall. There's no gate. There's no anything that's open. So that, that was the hope.  
17 And I think by lighting the corner, having my building setback from that corner, I think it will  
18 absolutely help in the future of Lahaina.

19  
20 Ms. Duvauchelle: Thank you. I have a quick question for Rory. The crosswalk that's in the  
21 picture, is that State or County? Because --

22  
23 Mr. Frampton: It's State. And the State when they came in and did the widening of the highway,  
24 they put in the sidewalk from here down, you know, to Prison Street and beyond. So there have  
25 been a few things that have happened more recently that have improved the situation for  
26 pedestrians. And where that sidewalk is you know this project would connect to that and take  
27 the sidewalk all the way down to their makai boundary.

28  
29 Ms. Duvauchelle: That would be good. And then as part of your engineering in your submittal  
30 will go to the State of Department of Transportation also?

31  
32 Mr. Frampton: Yeah.

33  
34 Ms. Duvauchelle: Because your property adjoins. What is the right-of-way? What's the setback  
35 and the site distance there? I mean like how far from the curb till the development begins? I  
36 mean is there a, is there a setback there? Is it 30-feet or --?

37  
38 Mr. Frampton: Well, it's basically the parking lot is what we have.

39  
40 Ms. Duvauchelle: Okay.

41  
42 Mr. Frampton: I'll show you on this slide. So this is the --. The Dickenson Street is down here,  
43 and you can see the provision of the sidewalk, and then there's you know four parking stalls  
44 deep. One, two, three, four. So there's the parking lot basically pushing the building back, and  
45 that building is all the way at the back of the property.

46  
47 Ms. Duvauchelle: And the highway is?

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Mr. Frampton: The highway runs along this side here to the left of this figure.

Ms. Duvauchelle: Okay, thank you. I'm sorry, Commissioner Kahu Hill did you have a question?

Kahu Hill: Mahalo. Is this working? I have a few questions and concerns. You mentioned in the traffic assessment, I was trying to understand about 8, 23 about that there could be high peak traffic times as far as one lane construction is happening and that there would be turns of vehicles coming in eight times in the morning hours I believe, and up to 23 turns of equipment and what's needed in the p.m. So I wanted to understand a little bit more about that and what is the p.m. for you? What is the construction hours? I'm just looking at school hours?

Mr. Frampton: Yeah, I believe the traffic report what they typically do is they generate their trip generation rates it's based off tables for residential project that those estimates are the amount of trips that will be coming in and out of the project, in the morning peak hour and in the evening peak hour or afternoon peak hour. And I believe that afternoon peak hour it's specified in that report, but I believe it was like three or four or something like that. But it is specified in there. And so they do their analysis based on the worst case situation, of the trips coming in and out during the peak hour, and the peak – the peak a.m. hour and the peak p.m. hour.

Kahu Hill: And I also want to know how are you working with the school and their school hours as far as the construction at this time?

Mr. Frampton: The construction traffic?

Kahu Hill: Yeah.

Mr. Frampton: The construction traffic Chris can talk about that. Do you want to mention how you work with that?

Mr. Ondatje: Yeah we did kind of chat with -- Mariah and I had met with Sacred Hearts, and I know all the teachers and everything. But we had talked about kind of their hours of operation and what's going on. So our construction hours will be what the County allows us to do is eight o'clock in the morning. We'd start, we probably start getting to the job before that, before the kids get there. Everybody would probably start getting there early, early, so about 7:30-ish and so it's kind of before Sacred Hearts. And the Sacred Hearts will get out at 2:00 to 2:30 and then we won't be leaving there until 3:30. So we did coordinate that as far as that's concerned.

Most of our stuff as you see the, the ability to have our trucks and stuff pull into the driveway early on in to it that's one of the, that's one of the pluses to having the property back before besides what we had already talked about. So that allows us to do that. And so in the way that, that we have it planned and scheduled our material deliveries may come earlier in the morning and deliver, and we have some good staging stuff. But primarily we also had worked with the parking lot people on the, on the ocean side of Sacred Hearts and so our intent is if we have more than two or three trucks that we can park some of the workers in that general area. And I would get parking passes for everybody so they'd be in the parking lot area. But for us mostly it's, it's going to be a relatively easy construction where I won't really have that many people



1 there all the time. So as you know in construction everything is in layers and so at any given  
2 time I may have two plumbers, one electrician, and two or three carpenters. And that is what  
3 we'll have. And so we've accommodated that in our thought of the layout of the parking lot and  
4 so on, and trying to minimize the impact. And also everybody that works for me including all of  
5 my subcontractors and everything are all Lahaina people, and we all know that area really well,  
6 and most of us have had our kids go to that area as well. I've used the same contractors, my  
7 subcontractors for over 20 years and we're all Lahaina based so it enters a little bit easy.

8  
9 There's not that much heavy equipment work that needs to be done so we really don't have to  
10 worry too much about heavy bulldozing impact or anything. It's all mini excavator stuffs so it's a  
11 relatively small piece of equipment for what we need to do and dig. And I'm real familiar with  
12 you know toning of everything and all the utilities around in there. Rory had mentioned there  
13 was a home on that and I will tell you that I saw a no sign of that. There is nothing in the  
14 ground. You know typically if you had an old home that used to be that there's something in the  
15 ground. There's nothing. No old footings, no nothing like that which is an interesting thing. So  
16 it makes me think well maybe they did post and pier back then. And then when they removed it,  
17 they removed everything. But yeah so that was, that was our thought. So construction wise  
18 we're trying to gear our hours so before the kids are due to come to school and after they leave  
19 so that our --. And that works really well for most of us contractors that are on the west side  
20 anyway. So it would be something that we would do, and then it helps limit a little bit.

21  
22 Also in talking to my neighbors we had talked about that kind of their schedules of coming and  
23 going and some of their tenant and stuff. So those hours as I mentioned are fairly good. So we  
24 can get in there at 7:30 a.m., between 7:30 and 8:00, we're pretty good. And if we can get out  
25 of there between 3:00 and 3:30 that really, it would really, you know, we'd miss each other on  
26 any impact that could happen. Like I said most of the people are all -- all of the contractors, all  
27 of us contractors are all west side guys and we're all from that area.

28  
29 Ms. Duvauchelle: Thank you.

30  
31 Kahu Hill: Mahalo. May I follow up?

32  
33 Ms. Duvauchelle: Go ahead.

34  
35 Kahu Hill: I wanted to understand you had mentioned when there would be needed about  
36 having flaggers, and though there's crossing guards for the children across them, I'm also  
37 concerned about the kids and the traffic and that turn. It would seem like if they would be to  
38 have flaggers daily. I'm wondering what your plans for that is.

39  
40 Mr. Ondatje: Yeah, so my plan would be that if needed we have our signage and we have  
41 flaggers and stuffs. We're versed on it. We're good with that. So whatever is needed to reduce  
42 or safety I'm open to any suggestions that I haven't addressed. I believe that we've addressed  
43 all of that. I have thought it through quite a bit and with, for us basically the earlier we can drop  
44 off materials and things that it minimizes our impact. So I talked to our immediate neighbor  
45 about what if I did the delivery at 6:30 in the morning. And so we'd come in there, fork lifted off,  
46 truck leaves, and they're out of there before 7:00. Is there any impact? Most of them were  
47 saying that they are getting up at, you know, six o'clock any way to get to work at 7:00 or 7:30

1 and so that worked out pretty good. Sacred Hearts worked out where they can -- we can come  
2 in and out early and later and it won't impact them. And we've all seen the parents that are in  
3 line trying to get to their kids. So they have done a really good job with taking that onto Wainee  
4 Street but we're there to coordinate. Yes, and I have flaggers and safety people that would be  
5 there and help with all of that too. And by all means we would schedule anything coming and  
6 going with Sacred Hearts. It's an added benefit to have and a little bit of a relationship with  
7 them. And Mariah is a graduate from Sacred Hearts.

8  
9 Ms. Duvauchelle: Thank you. Any other questions? Comments? Commissioner Higashi?

10  
11 Mr. Higashi: I have one more. As you know that Lahaina has a shortage of affordable housing  
12 and yours is not really major but yet it might make an impact on workforce housing. Have you  
13 ever considered the price of the homes or condo that you're going to be developing to  
14 accommodate the community versus the tourist?

15  
16 Mr. Ondatje: Yeah, first of all mine are all long-term so it really wouldn't be a tourist situation. I  
17 did not plan for tourist at all. It's mostly long-term. I don't know exactly where I'm going to be  
18 with the rent because I don't know. So far I've done a little, almost two years' worth of, of  
19 climbing all of this, and Rory and Mariah are great but they are not the cheapest people . . .  
20 (inaudible) . . . consultants. So depending on where I am, I will be, you know, at market rate or  
21 below. But I really don't know. So I am adding some amenities to all of these things and  
22 depending on what that is it goes for. You know, there's possibly --. We'll for sure we're fire  
23 sprinkling it and we are doing, we may do air-conditioning. I am trying to add amenities. I'm  
24 trying to make it as nice and comfortable for people as possible, and so I don't really know  
25 where I'm going to be. And as you know everything in all of that it has to, it has to sort of pencil  
26 out. So depending on where I'm going is, is where we'll end up. But I know I'll be below market  
27 rate, and my intent is to make it affordable for the young adults that we have that they can come  
28 and live there. You see the yard space is in the back that I've done. So my intent is to fence  
29 those areas also independently. So a lot of them have young kids so your kids could be  
30 playing. You don't have to worry that the ball is going to run into the street, and they're back  
31 there and it's fenced and it's safe for the kids. And there's also going to be a little vegetable  
32 garden area that each person would get. And so that can help, it's trying to build that sense of  
33 community. For me like I said Lahaina has been a really good place for me to raise my children  
34 and I'd like to leave that legacy.

35  
36 Mr. Higashi: Thank you.

37  
38 Ms. Duvauchelle: Thank you. Commissioner Kahu Hill?

39  
40 Kahu Hill: I have visual resources in the urban design landscape character and the building  
41 character, it says building height should reflect the content, existing building heights, and  
42 massing in the Lahaina Historic District, and that a maximum building height should be two-  
43 stories or 35 feet. What really encouraging the one- to two-stories. I noticed that you do have a  
44 third floor so I was wondering what is the height of the building?

45  
46 Mr. Frampton: The --. Very good question and good reading. The third story component is  
47 under the 35 feet. So we've very much aware of that language when he decided he wanted to

1 incorporate the third story. It's on the makai side so it's, so that it's not as imposing for the  
2 traffic going on the highway. And the roof pitches are designed to keep it more residential in  
3 scale and character, but it is under 35 feet.

4  
5 Kahu Hill: Okay, and also it states the interior street should be designed to soften the effects to  
6 build environment and landscaping will provide a visual buffer. So you say that you're doing  
7 that. I like that you're keeping the monkey pod tree and being able to make a visual buffer from  
8 Honoapiilani Highway and the property. But I'd like to . . . (inaudible) . . . that you said that you  
9 eliminated the plant life to be able to have this lighting and things that, at night. And as far as  
10 looking at Lahaina town, I'm not saying that you're creating that visual buffer or softening it or  
11 having the indigenous plants or flora fauna, landscaping from Dickenson Street and then  
12 wondering why that's here as far as it is being setback or the turn of the safety problem that I'm  
13 just looking at everything for Lahaina town.

14  
15 Mr. Frampton: Yeah so there will be landscaped planting along all three sides of the property  
16 with a variety of plants that are not identified in the book, but we've updated the plant list and it  
17 will be included in the Final Environmental Assessment. And then along Dickenson Street, you  
18 know, it is, it is a tight property to try to put all of the parking stalls in and the building itself. But  
19 what we did was the parking, the parking stalls that are along Dickenson Street are all on grass  
20 crete so you don't have a bunch of concrete. So a grass block, it's basically blocks that have  
21 grass to grow out of it but you can park on it. And you're allowed to have 25% of your stalls in  
22 that alternative surface. And that was the intent of having the grass crete run along Dickenson  
23 Street was not have it a sea of pavement if you will from Dickenson to the apartment building.

24  
25 Ms. Duvauchelle: Commissioner Tackett?

26  
27 Mr. Tackett: My only question is about the corner, the one that everybody says has the least  
28 amount of visual from when you're coming off a high speed roadway. I see the parking spaces  
29 go all the way through and that you've got some, some plantings over there. How do you feel  
30 when those areas are filled with automobiles? How do you feel that will impact the visual that  
31 you're trying to create? Because to me that's the dangerous part is people are going really fast  
32 and then they slow down a little bit to turn on to some place that they can't see. And are, are  
33 the cars and the bushes going to be higher than maybe the height of the children that found  
34 themselves in that dire predicament before? So that corner is kind of -- if you could explain that  
35 corner and what you perceive with that layout.

36  
37 Mr. Frampton: Yeah so I'll start just by -- you know, on Sacred Hearts side when you're coming,  
38 taking a right on to Dickenson Street, they have done things but there is the wall there. But they  
39 have done things to reduce the visual impacts there. So when you're leaving Dickenson Street  
40 and coming out along here -- let me just show -- so the plantings will be kept low. There is a car  
41 there, but there is going to be sidewalk space and the corner will open. So it will enhance the,  
42 the visibility. And the elevation that's a little bit lower than the highway there as well.

43  
44 Ms. Duvauchelle: You'll have to come to the microphone. And please state your name again.

45  
46 Mr. Ondatje: Sorry. Chris Ondatje, that's my name. So what we had done is I shot some  
47 elevations basically from the turning lanes on the highway side, and to shoot elevations into it.

1 So, easily you're sitting in your car you'll be able to see unless everybody's got you know huge  
2 four-wheel drive trucks or something, you'll be able to see over the top from either turning lane.  
3 And note that in that, in that elevation change that I have there, and that's kind of why I just  
4 perimeter covered the fence a little bit with some plants. But what that allows you to do is sitting  
5 comfortably in that turn lane you can look over that corner and I thought, me personally, that  
6 was a thought that would just make it a lot safe around that corner, is that it gives you that  
7 visual, so you're turning into it.

8  
9 Now on the Sacred Hearts side the elevation so it kinds of ramp upwards as it gets to that  
10 general area so you do have some elevated, you know, passage ways through there so you can  
11 see clearly across the parking lot, across everything. So we did take that into consideration. I  
12 did shoot elevations and we've adjusted our elevations to be able to look over cars.

13  
14 Mr. Tackett: So your final parking lot elevation is it similar to the elevation shown or is it  
15 depressed?

16  
17 Mr. Ondatje: It's depressed slightly from where it is now. It's also -- I have to slope back and for  
18 so I can keep the water runoff on the property anyway. So what we did is we reduced elevation  
19 and then reduced elevation again as we went into the parking lot to keep the building slab at a  
20 higher elevation and the parking slab at a lower.

21  
22 Mr. Tackett: So the lowest spot of your drainage would be the, the corner in question?

23  
24 Mr. Ondatje: The low spot of my drainage will be just adjacent to the corner. So if you look at, I  
25 think, Stacy our civil had kind of addressed that, but that was our intent is so just off of the  
26 sidewalk coming in will swell down and then from the building all the way will swell down to it.  
27 And that's, that's our hope. But I did shoot elevations. So coming from the turn lane your  
28 question we did think about that and how that's going to be. So we are low enough where you  
29 can see over even if the parking lot is full you can see over everything.

30  
31 Mr. Tackett: Thank you.

32  
33 Ms. Duvauchelle: Thank you.

34  
35 Mr. Ondatje: You're welcome.

36  
37 Ms. Duvauchelle: Commissioner Carnicelli did you --?

38  
39 Mr. Carnicelli: The telephone pole that's existing right there you guys said you were going to do  
40 a slight widening of the road . . . (inaudible) . . . sidewalk. Is that going to be relocated or is that  
41 staying there?

42  
43 Mr. Frampton: I'm looking on the plans here I believe it stays in place, and it goes right up  
44 against the sidewalk. So the sidewalk will be, will start at that point and going backwards.

45  
46 Mr. Carnicelli: Okay. If you could go to the site plan really quickly. Here's what I'm -- I guess  
47 my concern about the parking, the staff parking. I'm trying to visualize 16 cars there and

1 someone is trying to back out to then let their, say their spouse --. Let's say they're the inside  
2 car. I've got to pull out to let the other person come out . . . (inaudible) . . . I mean I don't know  
3 calculations and stuff like that. My concern would be is that first car pulls onto Dickenson you  
4 know . . . (inaudible) . . . room. I mean, is there a room to get a car in that stacked situation out  
5 of way so the other car can get through?  
6

7 Mr. Frampton: Yes, yes. Good question. And that's what the aisle is for. And the aisle is wide  
8 enough. It conforms with the County's standards. And there's actually a little bit further extra  
9 space going back that way so they can reverse. But the aisle is wide enough so two cars can  
10 pass.  
11

12 Mr. Carnicelli: Okay. I have one question for either the Department or for Corporation Counsel  
13 and that would be A2 allows condominiumization. Is there a way of which --? You know  
14 because the representation and the intent of this is this is going to be apartment. This is going  
15 to be rented long-term. And it's not going to be condominiumized and sold. Is there a way with  
16 which that can be conditioned?  
17

18 Ms. Duvauchelle: Corp Counsel?  
19

20 Mr. David Galazin: Thank you. I'll speak just from an apartment . . . (inaudible) . . . Yeah, I  
21 mean you obviously have seen Council put all sort of conditions whatever they want on  
22 something like that. And so if you know this comes back through, and the request for re-zoning  
23 comes back to this body to make a recommendation, at that point in time you know your  
24 recommendation could certainly be sure we agree on A2, and we would also suggest put in this  
25 condition that you know and not be subject to a condominiumization.  
26

27 Ms. Duvauchelle: Director?  
28

29 Mr. Spence: No I would just concur with what Corporation Counsel is saying. I'm not sure why  
30 we would want a condition like that necessarily. But I mean it could be --. It's living space for  
31 our residents. But Mr. Frampton is . . . (inaudible) . . .  
32

33 Mr. Frampton: If your concern is short-term rentals the apartment district law was changed. And  
34 so now the apartment district is for long-term residential use. So the types of examples that  
35 Aunty Patty talked about where various apartment units were converted to short-term rentals  
36 that was done prior to the law change. And so now under this zoning he can't do short-term  
37 rentals. If your concern was short-term rentals, he can't do it unless he was to come back to the  
38 Council and change the zoning because the apartment doesn't allow short-term rental.  
39 Apartment District does not allow short-term rentals. Was that your main concern? Or was it  
40 changing the type of ownership from rentals to CPR?  
41

42 Mr. Carnicelli: Yeah I mean that was more of the thought behind my question was, you know,  
43 we need the full spectrum of housing in our community right now. And if something is long-term  
44 rented it is definitely absolutely people that live here. If it's condominiumized and sold whether  
45 it's short-term or not that is you know now becomes saleable goods that potentially can be sold  
46 to people that don't live here. And so that's all. That was just the intent. When I look at one of  
47 the things that we look at here is social economic impacts and so that's just you know within the

1 thought behind the question is all. And I know that's not necessarily what we're here to do  
2 today, but I just wanted to have that in my . . . (inaudible) . . . Thank you.

3  
4 Ms. Duvauchelle: Thank you. Commissioner Robinson.

5  
6 Mr. Robinson: Hey Rory. Already is we're trying to get units in for housing, and you're coming  
7 to a Planning Commission that's gave away 40 houses to short-term rentals and we're  
8 concerned about eight. I'm with you guys. I think we're all with you with trying to get it. I think  
9 everybody's concern is the safety. Has there been any discussion with you guys with anybody  
10 in Dickenson becoming a one-lane, a one-way street?

11  
12 Mr. Frampton: Yes.

13  
14 Mr. Robinson: And street parking, Church, you know, one lane that? Because my concern is  
15 the trucks. Is the trucks that's going to come in for the construction, flag, no flag, it's the speed  
16 that's coming around that turn. I mean everybody bought up a point that I think we're all thinking  
17 the same thing, you know, cars, distractions. I'd like to see that parking lot full and like fellow  
18 commissioner says you know you try to reverse from that one closest to your building you know  
19 while they're all there. You know, it's a -- it's not optimal. And which, which brings me back to  
20 the point. Can we go to the first slide you showed us of what we're here for and what we're  
21 here today and what's going to happen? You had the dates and the processes. Right there.

22  
23 Mr. Frampton: The time line?

24  
25 Mr. Robinson: Yeah. Okay so that's what we're here today is for the Draft EA review.

26  
27 Mr. Frampton: Yes. And we'll come back for the public hearing to consider the Change in  
28 Zoning and the SMA.

29  
30 Mr. Robinson: But are you asking us for a FONSI today?

31  
32 Mr. Frampton: No.

33  
34 Mr. Robinson: Okay.

35  
36 Mr. Frampton: We're anticipating that the Director's going to be able to make that determination.

37  
38 Ms. Duvauchelle: Director?

39  
40 Mr. Spence: What we're looking are comments from the Planning Commission that -- and Paul  
41 will, I assume, make a list of things that the Commission wants to see in the Final EA. And then  
42 ultimately it will come back to the Planning Department. Some EA's come to you for that  
43 determination, others come to the Department. And so we anticipate in this case it will come to  
44 the Department for us to finally accept it. So then what Rory is saying is once this part of this is  
45 done, the EA part of it is done, it's going to come back to this Commission. You're going to  
46 consider the Change in Zoning where at that time you may or may not recommend conditions to  
47 the County Council. And you will also conduct the public hearing for the, for the Special

1 Management Area Permit. That will -- you can't really approve that until such time as the zoning  
2 is granted. But there will be no doubt be conditions on that as well. So you're going to get a  
3 couple of more reviews of this and they're going to take into consideration all the comments that  
4 they've received thus far as --. So they've still got a long process to go.

5  
6 Ms. Duvauchelle: Commissioner Robinson.

7  
8 Mr. Robinson: Which is part of the point I make, you know, we're going away houses and it  
9 takes us two years to put them in. Having said that I'd like to go back with fellow Commission  
10 about the third floor and the 35-feet. I didn't see a topography map on this Draft EA, but I saw  
11 where it starts at 24 and then goes to 28, and then I just heard during the parking where you're  
12 slanting towards the 28, not towards the 24. That's what I heard your applicant said about the  
13 parking slanting towards the street. So can we go to that map and you show me the height  
14 levels of where we're going to get 35 feet? I'm assuming that the middle of the lot is 26? Is that  
15 a fair assumption? Because is that how you're looking at it?

16  
17 Mr. Frampton: So it's hard to read from the side. The finish floor elevation of the building is  
18 going to be 28 ½ feet. The parking lot is going to slope from on the mauka side about 28 feet to  
19 about 25 feet on the makai side because the ground is naturally sloping.

20  
21 Mr. Robinson: Towards the ocean.

22  
23 Mr. Frampton: It's going to be towards the ocean. It will be, it will be slightly depressed on the  
24 mauka side, but still the overall flow there's going to be a capture point. So here are the parking  
25 stalls. This building is at 28 ½. It's going to drain to a drain inlet there, and a drain inlet at the  
26 bottom so there will be some water going into that collection point, and then that collection point  
27 as well. The elevations of the building show it at...it's going to be just under 35 feet from that  
28 finish grade of the parking lot.

29  
30 Mr. Robinson: So above 28 ½ feet, it's going to be 35 feet above that.

31  
32 Mr. Frampton: Yes. Less than 35.

33  
34 Mr. Robinson: Okay. I'm not 100% familiar with the building code so I won't comment on what  
35 the measurement starts from. So what are the height levels of this, of this complex for the  
36 residents if we're doing three floors and 35 feet?

37  
38 Mr. Frampton: You're going to do eight foot high, eight foot standard eight foot high ceilings.

39  
40 Mr. Robinson: With sprinklers? And I guess sprinklers, and that's when I heard sprinklers, and I  
41 heard 35 feet, three floors, I'm like that's, that's not much height.

42  
43 Mr. Ondatje: So on the sprinklers we had talked a few times through it and our mechanical  
44 engineer --. We went through it and we kind of calculated out what the water usage and such  
45 would be. But so that -- it is doable. The 35 feet and where going in there, so in some of the  
46 areas I may have a staggered floor elevation only because I like a little bit more ceiling height if  
47 possible. So we were looking at nine-foot in the bottom floor, and then eight-feet on the units

1 because the second floor would have a vaulted ceiling. So it sort of gives you that, a little bit  
2 better feeling. And yeah so it would be the zone controls for the fire sprinklers were calculated  
3 for zone coverage with all of that. And so that's how we worked out where it would be  
4 advantageous for us to do fire sprinklers.

5  
6 Ms. Duvauchelle: Commissioner Robinson.

7  
8 Mr. Robinson: I'd like to ask about the, the flooding. I saw where the map it said that it's not in  
9 flooding map, but for the displacement it was 0.8 is the displacement for the, for the drainage,  
10 from where the house is because you're going to have permeable parking. Is that correct? So  
11 the water that comes off of the highway because it's not curved or --? No, that is curved on that  
12 right side of where your house is going to be, right, that is curved and it does go to a gutter?

13  
14 Mr. Ondatje: It will be, but there's no drainage along Dickenson Street.

15  
16 Mr. Robinson: So it just curves and it flows right down into your property at the corner?

17  
18 Mr. Ondatje: It won't flow into the property.

19  
20 Mr. Robinson: But it does now off . . . (inaudible) . . . right?

21  
22 Mr. Ondatje: Yes.

23  
24 Mr. Robinson: So if water is flowing curving now, isn't that still your responsibility to keep it from  
25 going to the next lot? So . . . (inaudible) . . . is going to continue that water and continue it down  
26 Dickenson? That's past your location because you guys are now above where the 24 foot is?

27  
28 Mr. Ondatje: Yes.

29  
30 Mr. Robinson: So where is that water going to go to now?

31  
32 Mr. Ondatje: Where it goes now.

33  
34 Mr. Robinson: It goes in your property now. So when you have a sidewalk --. I mean it has to,  
35 it's gravity. If you have 28 feet to 24 it's going to find, it's going to find the easiest way and it will  
36 slope right there.

37  
38 Mr. Ondatje: There's also a curve.

39  
40 Mr. Robinson: A berm? Is that a berm there?

41  
42 Mr. Ondatje: Well it's slightly a berm and then there's also a curve running down the street right  
43 now that prevents the water from going into the property.

44  
45 Mr. Robinson: Okay if you say so.

46  
47 Ms. Duvauchelle: Is there, is there any other questions or comments? We kind of need to wrap



1 up here. We have lunch at 11:00 so we need to recess yeah?

2

3 Mr. Spence: Yes, Commissioners, yeah, if we could, if we could come up with a list of  
4 comments that we could have Mr. Frampton address in the Final EA that would be appreciated.  
5 You're going to see this twice more.

6

7 Mr. Robinson: I understand. I understand. I want to help them by getting much as they can  
8 now so the next time they come you know. And I understand we have time today. I mean we  
9 have to rush but I don't . . . (inaudible) . . . rush through and get as much as you can. I think  
10 with me Rory I like the fact, you know, I hope it stays, I hope it says long-term. As far as  
11 conditions, I think if there's a condition where we can keep it. Ownership would be great, but I  
12 know doesn't exist. Otherwise we wouldn't have short-term rentals from the mainland. If you  
13 condominiumize you can sell it to anybody, and you know what, hopefully it's locals. But it is  
14 what it is, it's market you know. But I think anything that add inventory should help, you know  
15 rental, homeownership. I personally am --. You know I think, I think the height is --. Is Weinberg  
16 only 35 feet or is it higher? They're exempted right?

17

18 Mr. Frampton: It's higher.

19

20 Mr. Robinson: Yeah so I don't know if we can get exempted and fit more. I know we're going  
21 through the new parking rules and that stuff on there in the future by the time this project comes  
22 up. I think this district might be changed because this could be a walking district to where I think  
23 it would be harder to put 16 cars and limiting it to 14 or something just in a . . . (inaudible) . . .  
24 But my --. What I'm, what I'm most worried about is make sure you take care of the flooding  
25 and that street coming off of Honoapiilani Highway turning right I don't think there should be a  
26 right turn at all. I think it should be turn right into Prison when it shows off and everybody only  
27 exit off the Dickenson and that's my feeling.

28

29 Mr. Frampton: And thank you. I did want to --. You'd asked that question earlier about if we  
30 had conversations about Dickenson becoming one-way and Public Works is looking at that. I  
31 think they proposed money in this budget so that they can do a comprehensive circulation study  
32 for Lahaina town. And that's certainly one of the options that they're looking at is converting  
33 some of the streets to one-way streets. And if they did that, it would make a lot of sense to have  
34 Dickenson to be one-way, mauka as you suggested, it makes a lot of common sense. And so  
35 we have had conversations with Public Works. Obviously this project can't implement  
36 something that big in scope but we want to do our part.

37

38 Ms. Duvauchelle: Thank you. Commissioner Carnicelli.

39

40 Mr. Carnicelli: . . . (inaudible) . . . for me this particular project when I looked at it and I looked at  
41 that vacant lot for years wondering what it was going to become, I do believe that making it  
42 apartment is the highest and best use for that particular property. I think a lot of what our  
43 concerns are, are just concerns about Dickenson. I hate making a right-hand turn onto  
44 Dickenson. I will actually go to Prison and around rather than take a right onto Dickenson. I  
45 don't even like that street. So I think the one-way --. Prison Street, yes, I turn onto Prison  
46 Street. So a lot of our concerns about, you know, kids walking and everything thing like that,  
47 that it exists now, you know, whether or not this, you know, happens or not. So this to me an

1 addition. You guys have just sort of glossed over it. But the fact that the sidewalk is going to  
2 end at your property, if part of that study what Public Works could do is actually continue the  
3 sidewalk all the way to Wainee, now we've actually solved you know an issue. We actually  
4 have a cross walk. You guys can only do what you can do so I appreciate that.

5  
6 You know on the north side of Dickenson you know that's just a rock wall, nothing's going to  
7 happen there. So this is I think an addition to the community. Like what you said I think that  
8 this is actually going to help all what our concerns are.

9  
10 The...the one part that you know isn't a part of this but when you come back for SMA you know  
11 the drainage thing is going to be the issue. You know I mean that's, that's, you know,  
12 Commissioner Robinson and myself talk about that every single time is so, you know, what is  
13 the drainage going to be when you come back for the SMA? That's going to be the big thing.  
14 And then like say traffic for now I guess you're trying to mitigate what you can, but if that could  
15 become one-way that would be awesome so thank you.

16  
17 Mr. Frampton: Thank you. And we will have our drainage engineer and traffic consultant at the  
18 public hearing.

19  
20 Ms. Duvauchelle: Thank you. Any further? All right, Rory, thank you.

21  
22 Mr. Frampton: Thank you very much Commissioners.

23  
24 Ms. Duvauchelle: Department's comments, recommendations?

25  
26 Mr. Fasi: The Department feels that this is an excellent project. Maui probably needs like a 100  
27 of these project. There's no perfect project, but this is about as close as it gets.

28  
29 Ms. Duvauchelle: Okay thank you. Do we need to repeat any of the comments or do we make a  
30 motion? What do we do?

31  
32 Mr. Spence: Well Commissioners let me just --. The biggest thing I heard was --. Well, there  
33 were a couple of things. I don't want to put one necessarily in front of the other. But there were  
34 a lot of discussion on traffic circulation including the possibility, going the possibility of making  
35 Dickenson one-way. The Commission has issues with the right-in, right-out onto to Dickenson.  
36 The sidewalk touching from Honoapiilani Highway down. I also heard concerns about the  
37 drainage; where's that going to go. And at least those are the highlights that --. There's  
38 questions about the 35 feet and I'll just tell you that a number of years ago we took out the  
39 number of floors out of the A2 Apartment District. It's the height. You know we're more  
40 concerned about the height than we are the number of floors. But, and then individual sites are  
41 limited by how much parking you can accommodate and floor area ratios so they're falling within  
42 these parameters that have been set. If there are other things that, that comments you  
43 specifically want to have addressed we can add to that list.

44  
45 Ms. Duvauchelle: Okay, Commissioner Kahu Hill.

46  
47 Kahu Hill: I would like to know in the future how they're working with Sacred Hearts during the

1 construction as far as the children learning. Their air-conditioning systems, the noise for their,  
2 for their learning, for their health just during the construction project, how they're going to work  
3 with this.

4  
5 Mr. Spence: Construction impacts.

6  
7 Kahu Hill: Yeah.

8  
9 Mr. Spence: Okay, that's particularly on the school.

10  
11 Ms. Duvauchelle: Commissioner Robinson.

12  
13 Mr. Robinson: And if, if they're able to get back to us if they got with Kupuna O Lahaina with  
14 those questions.

15  
16 Mr. Spence: Okay. With Aunty Patty.

17  
18 Ms. Duvauchelle: Okay. All right. Thank you very much. All right Commissioner we will --. Can  
19 we break for lunch a little early? Are we good to go? Corp Counsel we're good? All right  
20 Planning Commission will reconvene at 12 o'clock or one o'clock. What do we normally do?

21  
22 Mr. Spence: I know we have a workshop at one.

23  
24 Ms. Duvauchelle: Okay, Planning Commission will reconvene at one o'clock.

25  
26 *(The Maui Planning Commission recessed at 10:38 a.m. and reconvened at 1:00 p.m.)*

27  
28  
29 **E. Workshop conducted by the State Department of Land and Natural Resources**  
30 **(DLNR), Office of Conservation and Coastal Lands (OCCL) on the Sea Level Rise**  
31 **Report with comments from the Planning Department. (To begin at 1:00 p.m. or**  
32 **soon thereafter.)**

33  
34 Ms. Duvauchelle: Thank you everyone. Maui Planning Commission is now back in session.  
35 Director, our next agenda item.

36  
37 Mr. Spence: Thank you Commissioners. We're on Item E of your agenda. It's a workshop  
38 conducted by State Department of Land and Natural Resources, Office of Conservation and  
39 Coastal Lands. I don't know --. We have our own shoreline folks here. We have Jeff Dack.  
40 We have Keith Scott too and Jim Buika. Do you guys want to introduce our guests and  
41 everything so take it away?

42  
43 Ms. Duvauchelle: Take it away.

44  
45 Mr. Jeff Dack: Yes. I would say if we could have some lights off. Maybe the center lights would  
46 be --. We'll see. That's too dark. No, that will work. We have a dark slide presentation so  
47 turning them all off is a great idea, yeah. As mentioned I'm Jeff Dack, and Jim Buika that was

1 already introduced. I have Tara Owen's name up there because --. She's not here today  
2 unfortunately but she basically presented the -- gave us the basis of this slide set so I wanted to  
3 acknowledge her. All of these slides are hers. And after Jim and I go through a bit will be Sam  
4 Lemmo from the Department of Land of Natural Resources, Office of Conservation and Coastal  
5 Lands, the administrator there. And Brad Romine who works -- who's a part of the UH Sea  
6 Grant, University of Hawaii Sea Grant who works with him who will be presenting the main, the  
7 main presentation today.

8  
9 We want to start out with a little bit of Maui context and thanks --. So there's a few purposes to  
10 this workshop. The first half we'd like to achieve initial understanding of the way sea level rise is  
11 affecting Maui and will continue to do so at accelerating pace. We want to talk about options for  
12 adaptation to sea level rise. You'll hear from the DNLR folks again what is driving sea level rise.  
13 And they will show you how to view projected impacts at the site level through a sea level rise  
14 viewer. And then you may have seen already -- not hopes -- but may have seen the Mayor's  
15 proclamation on over all County's response to sea level rise, the sea level rise vulnerability and  
16 adaption report. Next.

17  
18 So after the DNLR folks present I'll get back up and talk a little bit more. We'll want to talk about  
19 what could be the Planning Department and Planning Commission responses to what you see  
20 in the sea level rise report presentation. You'll see options of how we can incorporate sea level  
21 rise into our current shoreline setbacks we've had in place for the last 15 years. We'll talk a little  
22 bit about how the chronic coastal flooding that you'll see again from the DNLR presentation.  
23 We'll talk about how we can begin to explore how to be addressing those impacts here in the  
24 County. And then a brief presentation or a few more slides on other adaptations that the County  
25 is already pursuing the Planning Department. And then I'll finish up a list of notation about how  
26 the West Maui Community Plan is going to be incorporating sea level rise.

27  
28 So at the beginning here, Jim will take over and talk about coastal erosion and current impacts.  
29 And then as I say Sam Lemmo and Brad Romine will get up and talk about the actual report, the  
30 viewer. And then we'll go to Commission questions. And then we'll have County response,  
31 public testimony, and then questions and answers. So Jim Buika.

32  
33 Mr. Buika: Aloha, Madame Chair, Commissioners, my name is Jim Buika, shoreline planner with  
34 the Planning Department. And I'd like to thank you all for entertaining these items on the  
35 agenda this afternoon. And I'd especially like to thank Sam Lemmo from DLNR and Brad  
36 Romine coming over from Oahu to share the sea level rise report with you. So what I'll do is I'll  
37 just give you 10 minutes on just a quick placed space context on some of the coastal erosion  
38 that myself, Jeffrey, certainly Sam and Brad, along with Keith and Tara Owens. Tara would  
39 probably be giving this presentation but she's over in Guam sharing our mana'o from Maui  
40 about some of our issues here on a workshop agenda there.

41  
42 So of course we all know Maui County. I'm not going to talk about Molokai or Lanai because  
43 the Maui Planning Commission is for Maui Island only. Under our Charter we have three  
44 planning commissions. So what I will do is I will --. See we have nice bright shining light on  
45 South Maui Kihei there. We'll start there. We'll go down Halama Street, South Kihei Road, we'll

1 go up to the north shore, and then we'll come around Ukemahame and work our way up the  
2 west side here.

3  
4 So this is a typical image of Halama Street down in Kihei, central Kihei. The last half of the  
5 shoreline there is all rift raft sea walls from the 1980's, and on this end we have a lot of sand  
6 bags. A tail tale sign of coastal erosion is when your palm trees are no longer tilting straight up  
7 in the air, and they're leaning over like that. That means we're having -- they're being  
8 undermined and we're seeing a lot of palm trees being undermined. So this is a project area.  
9 Actually we're talking with some homeowners along this stretch where these sand bags are.  
10 They're hui'ing up similar to Kahana Bay which I'll mention to look at doing a small scale beach  
11 nourishment or some sort of, adding some beach sand out, out front here.

12  
13 Moving all the way up north to by the Youth Center, Kihei Youth Center on South Kihei Road,  
14 right before you get to Mokulele Highway. This is the South Kihei Road. Here, you can see the  
15 inset where the sea actually cuts through some runoff from the road. And so we have these  
16 erosion gulches on South Kihei Road that needs to be tended to. We haven't had too much in  
17 the last year or two, but this is a hot spot that we need to address, and mostly through Public  
18 Works.

19  
20 Going over to the north shore, Baldwin Beach. This is our pavilion. This is September 2016, the  
21 erosion. If you go out there right now there's a big wide beach. The beach comes and goes in  
22 this area. We almost lost the pavilion two Labor Day's ago. Last Labor Day wasn't as bad, but  
23 you can see the runoff there to that second post here. So we're working with Parks and Rec to  
24 manage this here.

25  
26 So then moving from the north shore over to Honoapiilani Highway, this is Ukumehame area in  
27 2012 where they built a revetment along our coastal highway. This is compare and contrast  
28 with 2007. The next slide here, this is the same area showing that all of the work that State  
29 DOT did was not super effective here. We have problems with the rising sea level and tides  
30 going right over the highway. Some of you probably experienced this. I certainly have. It's no  
31 fun.

32  
33 Moving up farther north up to Kaanapali, south end of Kaanapali, the Hyatt. This beach right  
34 now is very wide. The beaches come and go but what we had to do in this episode here to  
35 protect the boardwalk and some of the structures was we put this kind of a sand mattress out  
36 here to try to prevent some of the erosion from happening. So this is a temporary structure that  
37 is still out there today. Go ahead Jeff.

38  
39 Just going north. And this is our present day. This is January 2018, Kaanapali Beach Hotel.  
40 That is the Sheraton and Black Rock to the north there. You can see the Kaanapali Beach is  
41 pretty much non-existent. We've been since November, December, and then January and still  
42 continuing present day the beach, the people have no place on the beach. A lot of the naupaka  
43 is part of the problem here, the thick naupaka. And you can see in the very corner right there  
44 that's the Kaanapali, the building the structure on the right hand side that's the Kaanapali Beach  
45 Hotel. That's the Molokai wing that we had to protect. Next slide. So this is that same  
46 structure. We took out, just recently, took out the naupaka and put this kind of a unique skirt on

1 top of the sand here to protect the structure. The boardwalk we had to divert the boardwalk.  
2 And since then and it's March, the middle of March here, they've had end effects from this thing.  
3 We're having erosion impacts from this skirt, this mattress on the Sheraton side to the left of the  
4 picture and then on this downhill side here. So we're seeing more erosion from recent events.  
5

6 So moving up farther north of this area, an area called Honokawai area. It's a series of condos.  
7 We don't to the beach much there because there's not much beach. It's all older condos that  
8 were then built on sand. Many seawalls you can see off in the distance both directions, buried  
9 seawalls. Our team, Keith and myself, Jeff, Tara, we're out there constantly. What's  
10 happening, what I'd like to highlight in this picture here is the center, right in the center here is  
11 the sinkhole. And this is a 12 foot ladder down inside this sinkhole. And we have had in the  
12 past 10 years, we've had over 30 seawall sinkhole episodes in West Maui, North Shore, some  
13 down in South Maui. And so this is a problem with the older Hawaiian seawalls that were built  
14 on sand and the erosion is finally getting underneath the seawalls and is sucking out the sand  
15 from underneath them. We're dealing right now, I know Keith Scott was just dealing with one  
16 that where we have a large sinkhole underneath the structure of one of these large condos up  
17 there, just farther north.  
18

19 One good thing about Nohonani here, I'd like to thank them as well as Makani Sands where we  
20 did a few years ago. So the bottom line is we have to reconstruct, we have to manage these  
21 sinkholes, we have to try to prevent the ocean from getting underneath these seawalls,  
22 strengthen the seawalls, and part of the process on a volunteer basis when we can we attempt  
23 to get shoreline access into this area. So Nohonani has developed a shoreline access. We  
24 don't have parking there, but there is an access. They have a small beach there. And also  
25 Makani Sands and Kahana Sunset. So these are three voluntary shoreline access points we've  
26 gotten due to emergencies.  
27

28 So this, that is ubiquitous. We're seeing this, these sinkholes everywhere. If we haven't been  
29 to a condo I guarantee you there's a sinkhole on that condo, they just haven't reported it yet or  
30 whatever so it's a big, big problem.  
31

32 Moving farther north to very northern end of Kaanapali is Kaanapali Beach Club. It used to be  
33 the Embassy Suites; a big massive structure out there. You can see, actually I think Brad is in  
34 this picture, Keith, Tara, and you can see there's a 10 foot scarp. There's a big tree the erosion  
35 in the foreground with the --. This is a palm tree that came off. Here's the other half of the palm  
36 trying to hold it in. But the scarp is at least 10 feet. The beach used to be at the top here. So  
37 this was all in June 2016, bad erosion event that we had here so we're struggling with this area  
38 here. This is a massive structure, the Kaanapali Beach Club. I'll show you a little bit in the next  
39 photo. So we're going to go -- there's a pool reef right behind this. Jeff next slide. So this is a  
40 drone video, I think it's a clip from it. So this is the structure that we're looking at. This is the  
41 erosion that we were, those folks were walking on right there. You can see how narrow this  
42 beach is getting. And then this is a problem structure here too, the Maui Sands. The --. This  
43 has 1984 US Army Corp of Engineer seawall out here. But you can see what's happening here  
44 is the ocean is actually going right around the building. This is a good candidate for a retreat.  
45 They have a large parcel that goes way back here, and they're experiencing some problems out  
46 front here.

1  
2 As far as the Embassy Suites, the Kaanapali Beach Club, this is a massive, massive structure.  
3 So what they're coming in to protect their area right here is they're coming in for a small scale  
4 beach nourishment. We're going to try to protect the building through a rebuilding the beach out  
5 front. So that is a year or two away. And we had to protect this area here. Kaanapali Shores is  
6 this next one here. Go ahead Jeff.

7  
8 So anyway, go back to that one Jeff. I'll just say just as far as retreat and the sea level rise and  
9 looking at solutions there are pretty much I'll just leave this thought with you. What can we do  
10 out here, right? It's basically we can do six things. There are three things we can do with the  
11 structures. We can either get rid of it, right? Totally retreat. Get rid of the structure. We can  
12 move it back, or we can move it up, right? Possibly we can move this structure back because  
13 they have land back here. This thing you cannot move, right, or it would be difficult elevating  
14 any of those. So remove it, elevate it, move it back, or we can harden the shoreline which  
15 we've been doing consistently through the last 20, 30 years such as Maui Kai here. We can  
16 harden the shoreline. We can re-nourish the beach. That's another option; that's the fifth  
17 option. And the sixth option is we can take on the sea level rise erosion event somewhere out  
18 here through . . . (inaudible) . . . break waters, build a baby beach out in back. So kind of rather  
19 than building a seawall 10 feet in front of a structure and taking on three feet of sea level rise in  
20 the next 20, 30, 40 years, it might be better to look at strategies for possibly moving out into the  
21 ocean. So those are your six, six options. And we can reconfigure things such as Kaanapali  
22 Shores here. We can lop off. You know if these guys got threatened, if they're smaller units  
23 potentially, you know, I'd hate to say it, but we would have to potentially remove one, or two, or  
24 three of these shoreline structures here. So that's all in the future. Those are the issues that  
25 we're dealing with. Jeff, keep going.

26  
27 Moving up to Kahana Bay. I think all of you have had some exposure to Kahana Beach area.  
28 This is Royal Kahana. Hololani is to the north of this. The end effect from Hololani had --. This  
29 is Royal Kahana, the next door neighbor, here where we had an extreme erosion event in April  
30 of 2016, and this hale is threatened. And then this next building, Valley Isle, is in the next photo  
31 here. So we totally lost our beach that was here forever. Go ahead Jeff.

32  
33 At this time we had a sandbag in to protect this corner of the Valley Isle structure here; a big,  
34 12-story condominium. Again, Valley Isle actually could be moved. Hololani may not be able to  
35 move, be able to, be moved because there's not much land, and Royal Kahana is the one in  
36 between which is a massive structure and I'm sure cannot be moved.

37  
38 So we have to strategize for very obvious options. The reasons we're allowing these sandbags  
39 is because they are coming in for a regional beach nourishment project which Jeffrey may touch  
40 on later on, and we can update you later. Go ahead Jeff.

41  
42 This is going farther north to Keanui Bay, October 2016. This is Kahana Sunset area. The  
43 Commission did allow some reconditioning of some existing seawalls here. But you can see  
44 this entire bay is the end number of where we don't want to go. It's totally sea walled in. This is  
45 some of my favorite beach sand in the area, but you can see what happens with big waves

1 bouncing off of this seawall right here. The seawall is over here. We get down to the clay area,  
2 clay that causes problems and we lose all of our beach. Go ahead Jeff.

3  
4 Looking to the south in that same Keanui Bay, there's a retaining wall that was authorized by  
5 the Commission, but built improperly so this collapsed in November 2016 right on the beach.  
6 So it wasn't built to the specs and we're dealing with that right now. But as we speak, it still sits  
7 in the water out there today.

8  
9 And then my last two slides, Napili Bay, sad to say, but beautiful Napili Bay is disappearing right  
10 before our very eyes. We have a meeting in the middle of April, a second meeting to discuss  
11 about doing a small scale beach nourishment up here. During -- this is kind of an erosion event.  
12 Here you can see the brown in the water here. What happens during high tides normally now is  
13 that the water, is the waves wash all the up to the shoreline. There's no place for anybody to sit  
14 anymore on the beach. It's very steep which has been just people love Napili Bay have been  
15 coming here for years. So we want to build the beach back up in front here as opposed to  
16 starting and hardening in some of these structures here to make it look like Keanui Bay.

17  
18 And then at the very end to the south here, just shows you the erosion event. Even the  
19 shoreline access is threatened here. The sand has come back, but these erosion events, these  
20 episodic events have a tremendous impact on the shoreline. Every time something like this  
21 happens it's me and Keith are headed out for a day trip on way up on the north Napili side here.  
22 It takes a lot of our time to deal with a lot of these emergencies. They may not be permits, but it  
23 takes a lot of time.

24  
25 So I'll finish with just summary slides. Erosion is wide spread on Maui as I've demonstrated.  
26 Most of our shoreline, 85%, according to 2011 study where Chip Fletcher from UH SOEST  
27 group contributed heavily. 85 of our beaches, 85% of our shorelines are eroding over the long-  
28 term. Maui's beaches are experiencing the highest rate of erosion from the Hawaiian Islands,  
29 and we have lost 11% of our beaches over the last century. I'm sorry I think I put that one  
30 Jeffrey.

31  
32 And so why is the coastal erosion occurring? One is the sea level rise which is increasing and  
33 Brad and Sam will discuss that now. And what we, what I've shown you are examples of  
34 seasonal wave conditions and storm that move sand incredibly, so it's these episodic events.  
35 Not really hurricanes but just big waves events, north, northwest waves that are causing a lot of  
36 our problems. And human impacts, the sand supply and transport. Preventing the sands and  
37 dunes through seawall from replenishing those beaches is one example of a human impact.

38  
39 So a glimpse of the future here. This was king tide down at mile marker 14, Olowalu area, in  
40 May of 2017. So today's king tides are tomorrow's average water level so that's kind of --. This  
41 is what we should be --. This is what we do expect to happen due to sea level rise in the future.  
42 So we have a job ahead of us, and as you guys all know the Maui Planning Commission is the  
43 sole authority for shoreline projects, so the buck stops with you guys to make decisions. It does  
44 not go to Council through the Shoreline Rules for the Maui Planning Commission, and the SMA  
45 Rules for the Maui Planning Commission. So you guys are the deciders, decision makers,  
46 arbiters of our shoreline into the future. So as we go along in this next year, if you guys require



1 any more updates on seawalls and, or any information like this Tara can, Tara Owens, who's  
2 not here today can provide you more education, information as some of this projects come to  
3 you. So I'll turn this back over with the chair's permission to Jeffrey to keep going, and have  
4 Sam and Brad take over.

5  
6 Ms. Duvauchelle: Thank you.

7  
8 Mr. Buika: Thank you for your attention.

9  
10 Mr. Dack: Now we have a short switch to presentation by Sam Lemmo and Brad Romine. You  
11 can come up now.

12  
13 Mr. Sam Lemmo: Thanks Jeff. Can you all hear me? Okay. Well, that's, that's a tough  
14 program to follow. I don't know what to say, but we're going to go deeper into it. It's not over  
15 yet. Anyway, thank you. My name is Sam Lemmo. I'm the administrator for the Office of  
16 Conservation and Coastal Lands (OCCL). We're an office at the Department of Land and  
17 Natural Resources, and I just really need to explain real briefly what we do so you understand  
18 why we're here. My office basically regulates all the conservation land in the State of Hawaii,  
19 so any land that's not zoned agriculture, rural, and urban, our office regulates. So it's about half  
20 the land in the State of Hawaii. Plus we regulate all of the submerged lands out to three miles  
21 and so we're responsible for essentially all of the beaches and submerged areas out to three  
22 miles. It's a huge, huge geographic area so in fact I've always said that we're always like the  
23 fifth planning department in the State, you know. We have the largest geographic area to cover,  
24 the smallest staff, however, you know, the density aren't as great as you guys face at the county  
25 so we are able to manage it to a certain extent. Although some people will probably disagree  
26 with I just said.

27  
28 So we basically are everywhere. Not only are we on all of the islands in terms of having a  
29 presence, in terms of regulating, enforcing land use regulations in these areas, we're in the sea  
30 out to three miles. Perhaps between the isles we're on the beaches, and so we're very close to  
31 all of you. We're very close to Maui County, you know, and Kauai County, Hawaii County, and  
32 Oahu. So it's very important that we have a very close relationship, right. And we all try to work  
33 together and coordinate our common functions at --. Not only regulating these areas, enforcing  
34 these areas, but doing our very best in doing that, protecting our resource, protecting our public  
35 access for ourselves and for future generation. And so I have a -- Brad and I and people at my  
36 office, we have a very, very strong relationship with Maui County, with Jeff, and Jim, and Tara.  
37 And in fact, we have many commonalities. Brad is with Sea Grant who works in our office.  
38 Tara Owens is with the Sea Grant, she works in the Planning Office. They all work together.  
39 We're constantly in contact with your Maui planners on these issues and we're trying to work it  
40 out as a team. And that's kind of one of the major themes in, you know, what we're going to talk  
41 about today with the sea level rise report is that, you know, we need to approach this looming  
42 threat, this horrifying specter of sea level rise and need to approach it and do problem solving  
43 as a team. That way we will be reasonably successful or we'll give ourselves the best  
44 opportunity to be successful in mitigating the adverse impacts of climate change and sea level  
45 rise. So one of the big messages is through this whole effort that we're talking about is  
46 collaboration, working together as a team, collaborating, going down the road holding hands

1 together. So that's kind of the main message I want to get across today. We may not always  
2 agree on things, but let's try to do the best that we can.

3  
4 So this is a little overview of the sea level rise report that we recently wrote and it's been  
5 accepted by the Hawaii Climate Change Mitigation Committee. It's a State committee. I'll talk a  
6 little bit about that. Am I on, am I on the controls here?

7  
8 And thank you for having us here today; really appreciate it. It's a pleasure to be here. So this  
9 is, this is all part of this Hawaii Climate Change Mitigation and Adaptation Initiative. Act 32 was  
10 a law passed by the Hawaii State Legislature, signed into, signed into an act by Governor Ige. It  
11 has a history back to 2014, but let's talk about what happened this last year. Essentially it's a  
12 State Commission to deal with climate change mitigation and adaptation. And Hawaii is  
13 basically the first state in the US to basically pass legislation to try to implement aspects of the  
14 Paris Agreement. There's been some cities that I think have taken that up, but we're the first  
15 state to do that, and we are part of a statewide climate alliance. 16 states in the United States  
16 are a part an overall alliance to deal with climate change, to mitigate global, to mitigate our  
17 carbon emissions and to find ways to adapt to climate change. And this whole commission, this  
18 whole alliance is rising up despite what's happening at the Federal level.

19  
20 So a part of that, a part of that statute was to establish a state climate commission and the  
21 heads of that commission are Suzanne Case who is the chair of DLNR, Leo Asuncion who is  
22 the Director of the Office of Planning, and we have four or five State Legislators that are on that  
23 Commission and so they're the heads of their subject matter committees; very powerful. And  
24 we have department heads, State department heads that are a part of that Commission, and we  
25 have all of the Planning Department heads at the county level. So it's a really, a really great  
26 opportunity to work on these issues together.

27  
28 So we're working on mitigation and adaptation, not one or the other, both of them because they  
29 both need to be addressed at the same time. So basically one of the first major things that this  
30 Commission has done is it accepted the Sea Level Rise Vulnerability Adaptation Report, which  
31 I'll go over with you now.

32  
33 So here's a picture of the cover page of the report. You can find this very easily by going to the  
34 Hawaii Climate Change portal and just click on it. There's also a viewer, an online viewer that  
35 goes along with this. It's a companion, an electronic viewer. And you can also view the viewer  
36 anytime. Brad is going to go over these documents in a little bit more detail after I talk.

37  
38 So I just wanted to point out that this report real briefly is a report. It's not a plan. So I wanted  
39 to make that distinction very clear because a plan is something that sort of directs us to do  
40 different things, right? It sets certain, sets certain actions and motion. A technical report really  
41 provides us information and recommendations on how to address a problem and then maybe  
42 manage the problem a little better. So it's a report. The bottom -- the purpose of the report was  
43 to assess vulnerabilities to coastal hazard and sea level rise, specifically sea level rise, and it  
44 provides recommendations for improving our resilience to coastal hazards. So the main feature  
45 of the report is that it essentially identifies throughout the State of Hawaii all of the major islands,  
46 all of the areas along on our coastlines that are going to be vulnerable to sea level rise over the

1 next century. So we actually mapped out these areas and we'll be showing you some of the,  
2 some of the areas that we mapped on Maui. So another thing this report did was essentially  
3 assessed through a sort of an economic impact statement, sort of assessed what the cost of  
4 this . . . (inaudible) . . . is going to be in terms of loss of property and structures. And Brad is  
5 going to talk a little bit about that. So it's essentially a, it's an assessment of the consequences  
6 of sea level rise in the Hawaiian Islands. Lots of assumption in that, but Brad will go over that in  
7 more detail.

8  
9 Finally, it kind of provides a number of recommendations, sort of like broad sweeping  
10 recommendations that we can perhaps consider at the local level to help familiarate the impacts  
11 of sea level rise on our communities. So in fact many of those recommendations that we  
12 identified in the report are already being considered at the legislature. A number of measures  
13 are being batted around. There's a huge one on the bus bill, Kalani English, to basically take the  
14 recommendations from the report and just adopt them all as State laws. There's more targeted  
15 legislation in place. I think there's one regarding the SMA's, reducing the size threshold for  
16 homes in the SMA in terms of when an SMA Permit is triggered, taking it from 7,500 down to  
17 about 2,000. Also, there's a proposed amendment to 205A to require people to consider the  
18 impact of sea level rise on development in the sea level rise exposure area which I'll go over in  
19 a minute. So a lot of things in the works already.

20  
21 Contents, you can skip that.

22  
23 And we do have a viewer which Brad is going to go over, and I don't really need to say anything  
24 about that. You can continue.

25  
26 And we have a climate adaptation portal. We have a website which I mentioned earlier. It has  
27 a lot of great...a lot of great tools on there. And you can see there on the right hand, you can  
28 click one of those boxes and get the report, and also the viewer. It's very simple to use, and  
29 very convenient.

30  
31 So basically before I --. I think that's it for me. But I just wanted to say that this Climate  
32 Commission at the State level is very exciting, and now have, it's being sort of administered by  
33 my office. I do have climate coordinator in my office. She's very motivated and she's already  
34 been reaching out to all of the other sustainability coordinators throughout the state. So our  
35 intent is to use this Commission to sort of, to sort of like reach out to all of the, all of the tools  
36 that we can find with State and County government. At the County levels you have Rob Coral.  
37 You have, you know, these guys. Not Rob Coral, Rob Parsons. And you have these folks. You  
38 want to reach out to them, talk to them about a bonafide adaptation strategy moving forward.  
39 What really what measures, what legislations, what county actions are necessary to try to like  
40 move the ball forward on this? I want to do the same with Kauai, with Big Island, with Oahu.  
41 We're working hand in hand with the City and County of Honolulu's climate commission. At the  
42 State level there's a number of sustainability office of coordinators. So we're trying to, we're  
43 trying to, you know, bring all these, all of these assets together and go into the legislature this  
44 next session for instance with sort of a unified game plan. Therefore, you know we can reduce  
45 the miscommunications, and the mis-connects, the disconnects, and the missed opportunities,  
46 and use them, you know, get the most out of them that we possibly could. So doing that means

1 getting in early with a lot of people and getting buy in on sort of an overall strategy to move this  
2 ball forward. So that's kind of one of the ways I want to kind of utilize this Commission at the  
3 State level.

4  
5 Well anyway, I think I've said far too much already so this is where Brad gets up? Okay, thank  
6 you.

7  
8 Ms. Duvauchelle: Thank you.

9  
10 Mr. Brad Romine: Aloha Madame Chair, Director Spence, Commission members. I'm Brad  
11 Romine with the University of Hawaii Sea Grant College Program, and I work in Sam's office,  
12 coastal geologist. I work in Sam's office under a cost share position, and my role in this report  
13 is helping to buy guide on the science and the modeling for the report, and also working really  
14 closely with the University of Hawaii Coastal Geology group and the lead consultant, Tetra  
15 Tech, on the report development.

16  
17 So first of all I want to share a little bit about the science and the modeling behind the report. I  
18 encourage you -- this will be a brief overview -- I encourage you to go to the report if you want to  
19 dig further into the science behind this work.

20  
21 So this is a plot of the increasing carbon dioxide concentration in the global atmosphere taken  
22 from the Mauna Loa observatory on the Big Island from the late 1950's to the present. What we  
23 see here is about a 25% increase in carbon dioxide (CO<sub>2</sub>) to the beginning of the record. It's  
24 actually about a 40% increase in CO<sub>2</sub> since the beginning of the industrial revolution. CO<sub>2</sub> is  
25 not the only greenhouse gas we're concerned. We also track methane and nitrous oxide, chloro  
26 floro carbons, but CO<sub>2</sub> is the one that gets more attention because it has really long lasting  
27 effects in the atmosphere. Its warming effects can last for a 100's of years in the atmosphere.

28  
29 This is looking at the CO<sub>2</sub> record over a longer span. Here's we're looking back 800,000 years  
30 and this is data taken from ice cores, taken from the Greenland and Antarctic ice shell, and they  
31 can actually remove bubbles from the cores and get the gas concentrations from those. And  
32 what you see there, the big ups and downs there on the scales of 10's or 100's of thousands of  
33 years the coming and going of ice age, ice ages, and the CO<sub>2</sub> record varies with that as well up  
34 to the present on the far right. And what you can see is that we're now well outside of the  
35 natural envelope of CO<sub>2</sub>. We're now at a little over 400 parts per million (PPM), about 408 parts  
36 per million CO<sub>2</sub> concentration in the atmosphere. Again, far outside the natural envelope.  
37 Really kind of doing a dangerous experiment on the earth's climate system.

38  
39 One thing to note is that --. So we're there present on the far right. The previous upswing there  
40 about 120,000 years ago was so --. Yeah, let me do that. Okay we're there at the present. The  
41 previous dip was the last ice age. We came out about 20,000 years ago. If you go to the next  
42 high point there in the CO<sub>2</sub> record that's the previous inter glacial stand about 120,000 years  
43 ago. Global atmospheric temperatures were on average, thought to be two degree C warmer at  
44 that time. And sea level was about 20 to 30 feet higher at that time so it is something that  
45 scientists look at as a possible model for where we're headed in the next few centuries if we  
46 continue to pump CO<sub>2</sub> in the atmosphere.

1  
2 And what we see is the global atmospheric temperature rising in close lock step with CO2  
3 record. You can see a real distinct warming in the record at the top left since particularly since  
4 the 1960's and 70's. In all we've added about a degree C, or about 1.8 Fahrenheit in net  
5 increase in global average temperature of the atmosphere since the late 1800's. Again, most of  
6 the warming coming since mid-century to the present.

7  
8 If you're familiar with the Paris Climate Agreement that agreement is intended to keep warming  
9 to two degrees C. And if at all possible, as little as 1.5 degree C. So from that plot you can see  
10 we've already used up about one degree of that warming so there's not a lot of buffer left for us  
11 to play with and it really calls for immediate action to greenhouse gas reductions. The bottom of  
12 the map of the world shows that the warming is not even all over the globe. Particularly the  
13 warming has been greater at the northern areas, and the polar areas, and the boreal regions  
14 which is a concern particularly for melting of the ice cap on Greenland, and loss of terna-frost  
15 and other impacts to the north. The warmings are a little more differential in the south. As you  
16 can see the area one in particularly to the west in our ice sheet below South America there  
17 that's a particular concern. Next slide.

18  
19 So along with the warming we see accelerating rates of sea level rise. This is a global average  
20 change in sea level height from in the blue, the blue wiggle plot there is from tide gauge  
21 stations. An average taken from the stations all over the global oceans. The red dots, more  
22 recent record. The last couple decades is satellite altimetry data from satellites that go around  
23 the planets and measure the actual surface heights of the ocean. And what you can see is this  
24 accelerating rate of sea level from that plot. Roughly doubling mid-century. And I should  
25 mention these rates, while they're in millimeters per year on the plot, we converted them to  
26 equivalent inches per century to give you a better sense of what that would mean if these rates  
27 would continue out into the next century. So doubling from early to mid-century, and then  
28 roughly doubling again or more up to the present, couple decades. And so it really looks like  
29 we're looking at minimum of at least of foot, a foot and a half of sea level rise if that rate was to  
30 continue out throughout the rest of the century. But we do expect the rates to continue to  
31 accelerate as we go along through this century. Next slide.

32  
33 So what's causing the sea level rise is two main contributors. First, it's added melt water from  
34 glaciers and ice sheets on the continents. That's become a more substantial contribution to the  
35 second contribution which is thermal expansion. As you heat up water, you heat up the upper  
36 portion of the ocean it actually expands. Like a gas expands but to a lesser degree. So the  
37 contribution from added water is actually now about double what it was. It's about the same as  
38 thermal expansion a couple decades ago. It's now about double what it was a couple of  
39 decades ago. Next slide.

40  
41 And most of this melt water is coming from the Greenland ice sheet from melt water. Greenland  
42 is presently losing about 281 billion tons a year of ice into the oceans. You can see that from  
43 the plot on the right over the last couple decades. On the left is a map of the Greenland ice  
44 sheet showing ice mass loss how that spatially variable. The dark red areas is being on order  
45 of about four meters equivalent of ice loss relative to 2002. And I think in the white and there's  
46 actually some light-blue areas and there are areas the ice sheet is still approximately stable

1 even growing a little bit. But the thing that's really concerning is the boundary between the  
2 yellow and the white areas, and that's known as an equilibrium line and that's the boundary  
3 between net loss and net stable or net gain ice. And we see that equilibrium line creeping up  
4 further and further up the ice sheet to higher elevations with each year. Next slide.

5  
6 This similar map and plot of Antarctica. It's a little more complicated story. Antarctica is losing  
7 a little less ice, but still substantial amounts in total. About 125 billion tons of ice loss per year  
8 on average. The ice loss for Antarctica is concentrated on the west Antarctica ice sheet. You  
9 can see that bright red or dark red area on the left hand side. There are some areas on  
10 Antarctica that may be, you know, stable or gaining some ice because the atmosphere actually  
11 contains a little more moisture as it warms, but on all this data finds a net loss in ice mass from  
12 the continent.

13  
14 So why are we concerned about sea level rise. You've heard some of this already. Increase of  
15 severity extent of coastal erosion is already a serve problem in Maui and throughout the islands.  
16 Wave over wash, already a problem with high waves and storms that we get frequently here out  
17 in the middle of the Pacific. That will increase the sea level rise. Ground water flooding and  
18 drainage failure will be an increasing problem as . . . (inaudible) . . . water rises at the  
19 shorelines, and raises our ground water tables in low lying areas in the back shore. Will also  
20 increase impacts of infrequent hurricanes and tsunamis. We don't expect necessarily to have  
21 more of those. There's some data that show we may experience more hurricanes, but  
22 regardless just the added water level underneath, and infrequent hurricane or tsunami events  
23 will make those impacts greater when we do have those.

24  
25 So now we're looking out to the future. What does this mean? What does sea level rise look  
26 like out into the future? And this is one -- this is a pair of projections from the Intergovernmental  
27 Panel and Climate Change (IPCC) from the 2013, fifth assessment report. This is an  
28 international body of scientists and policy makers that come together that do these global  
29 assessments of climate change and sea level rise. They provide two scenarios here in this plot.  
30 The blue line is a scenario where if we were to reduce greenhouse gas emission significantly in  
31 this decade and thereafter, the red one is known as the business as usual scenario if we were  
32 to continue to increase greenhouse gas emissions through the coming decades. And you can  
33 see there's an uncertainty band with each of those lines that increases as we go out towards the  
34 end of the century.

35  
36 For the purposes of the State sea level rise report, the DNLR, the Commission, our consultants,  
37 our science advisors elected to use the upper end of the upper scenario for modeling and  
38 mapping to see what is potentially vulnerable to sea level rise out of, you know, precaution. And  
39 also because the science on sea level rise continue to evolve as we're going on with the report.  
40 And I'll show you some other projections where this high range projection from the IPCC is now  
41 evolved into more of a mid-range projection from the ongoing science.

42  
43 So as I mentioned sea level rise science has really continued to evolve quite rapidly even in the  
44 three years we're going through this report. The IPCC scenarios I've showed you there again,  
45 they're broad consensus from scientists, policy makers across the world, large body of people.  
46 And it's been somewhat characterized as being conservative for that reason just because

1 there's so many people coming together to agree on those projections. 2015, NASA came out  
2 with somewhat, actually quite concerning statement given what we know about how the ocean  
3 expands as it warms, how ice sheets and glaciers are adding water to the seas. It's pretty  
4 certain we're locked into at least three feet of sea level rise and probably more. So that leaves  
5 the question. So it looks like we're going to see at least three feet of sea level rise. Are we  
6 going to see that in 2075, 2100? Can we really need to reduce our greenhouse gas emission  
7 and hold it off later in the century? It doesn't look likely, but the timing of that is still somewhat  
8 uncertain. But it looks like three feet of sea level rise. And also importantly sea level rise  
9 doesn't rise at three-feet. We expect it to continue on to the coming century as well.

10  
11 And then recently resolved from Antarctica and Greenland I showed you some of those maps  
12 and plots of the ice sheet behavior indicates the higher outcomes of sea level rise, maybe more  
13 likely than previously thought. So as a result the State sea level rise report, one of the first  
14 recommendations is that we plan for at least three feet of sea level rise sometime after mid-  
15 century. Could come as early 2060 or it could be later in the century. Next slide.

16  
17 So this is some sea level rise projections from a more recent report, a NOAA, National Oceanic  
18 Atmospheric Administration report in 2017 that looked at range of cutting edge, sea level rise  
19 reports over the last year or two. And they plotted a range of scenarios. Most importantly for  
20 this one, the three foot scenario that we used for the report has now become more of a mid-  
21 range scenario, if you look across all the science and the papers that are out there and what's  
22 shown in this plot. Also, they point to a physically plausible global means sea level rise of as  
23 much 8 ½ feet by the end of this century so that's a low probably scenario. That would be if a  
24 worst case scenario is the greenhouse gas emission comes true. Worst case scenario is of ice  
25 mass acceleration loss from the glaciers continue, but it's within the realm of possibility of it  
26 happening.

27  
28 So that's the outlook, the science. I'm going to talk a little bit about the modeling and  
29 vulnerability assessment results, show you some examples, how the modeling is done and  
30 some examples, and then we'll get into the sea level rise viewer and we can talk about some of  
31 the data and dive a little further into some the maps we produced with this.

32  
33 So there's three types of modeling we did with the sea level rise report, working with the coastal  
34 geology group at UH. The first is the passage flooding model. This is simply using a digital  
35 model topography in geographic information system software. Taking a digital model of the  
36 coastal topography and raising high tide level, average high tide level at various increments of  
37 sea level rise. And it's the first way to identify areas at the shoreline prone to flooding with sea  
38 level rise. You can see those in blue. Those are areas that are prone to direct marine flooding.  
39 They also identified areas in the back shores, there shown in green which are areas that would  
40 be indirectly flooded by rising ground water or reduced drainage.

41  
42 We also worked with them to model coastal erosion hazards. As you saw, as you're familiar  
43 with now, Maui is eroding on about 85% of its beaches. This model takes those historical  
44 erosion rates, and another model of describing how a beach profile should change with sea  
45 level rise. Combine those together, it gives hazard lines for coastal erosion. And what you see  
46 there in green if you can make that out is the present vegetation line and it's stepping out from a

1 half a foot, two foot, and up to three feet of sea level rise. That's a section of Ewa on Oahu.  
2 Next one.

3  
4 And then we looked at high wave flooding, the third model. Looking at how wave over wash will  
5 increase the shoreline. This model is an annual high wave event. Your typical average annual  
6 high wave event. What does that look like as it runs up over the coastline with sea level rise,  
7 and that model is showing a three feet of sea level rise, again, for a section of Ewa Beach on  
8 Oahu.

9  
10 And this modeling again was done using the IPCC scenarios. It's done in four steps: half a foot,  
11 1.1 foot, two feet, and 3.2 feet, but we're really focusing on the 1.1 foot scenario. It's kind of a  
12 near term or present day scenario. We saw roughly about a foot, as much of a foot of sea level  
13 rise. Temporary sea level rise with king tides this summer if you saw that. We expect to reach  
14 those sea level heights more frequently in the coming couple of decades. And then it also  
15 focuses on the 3.2 foot sea level rise is a scenario not necessarily for the end of the century but  
16 sometime within the second half of the century.

17  
18 Then Tetra Tech the lead consultant on the report took those three modeled map areas and  
19 combined them into a single level rise exposure area. Again, combine the coastal erosion,  
20 annual highway flooding, passive flooding into a single area, with a thinking that regardless of  
21 which of those three, or maybe it's two or even three of those are affecting a certain area, these  
22 areas are prone to chronic flooding with sea level rise at that particular height that's being  
23 modeled at. We refer to that again as sea level rise exposure area, SLRXA, or we've been  
24 calling it SLRXA for short.

25  
26 As with all models it's important to understand the assumptions in the models. We're looking at  
27 chronic flooding with sea level rise. It's not the only hazard that we expect. This is flooding  
28 that's going to happen on a daily, weekly, monthly or at least an annual basis. There's other  
29 hazards like the 1% coastal flood zones, like you're FEMA flood maps. It will also be made  
30 larger, more severe with sea level rise. But we're just looking at the chronic flooding with this.  
31 We're looking at potential permanent loss of land structures and displacement of people.  
32 Assuming no adaption measures are taken, this is just a vulnerability assessment looking at  
33 what's potentially at risk.

34  
35 There's an economic assessment. I'll show you some examples of all of these assessments.  
36 That's based on the current value of land and structures from the TMK parcel maps. So they  
37 took the TMK layers, overlaid the SLRXA over the top of that and looked at -- to calculate some  
38 monetary values of land and structures that are at risks from sea level rise. Those values, those  
39 dollar values do not include impacts, monetary impacts to utilities, roads, and etcetera, so it's a  
40 first look at the dollar value for vulnerability. But things like critical infrastructure can be even or  
41 a magnitude more when I show you some of these dollar values.

42  
43 So just to walk through some examples of the data. This is a section of north Maui  
44 Sprecklesville, Paia -- I think you're all familiar with this area -- showing the sea level rise  
45 exposure area at 3.2 feet. Again this is combined, a combined area of erosion, wave over  
46 wash, and the passive flooding. You can see wave over wash at the shoreline, some back



1 shore areas in the west end of the map that would eventually be turning into wetlands or  
2 perhaps turning back into wetlands. I'm not sure the history on that area. Next slide.

3  
4 Sea level rise will have increasing impacts to our roads. This is Honoapiilani Highway, modeled  
5 at one foot of sea level rise here. I imagine I think these are areas that probably are already  
6 over washed like during our king tides and other high wash, high wave events.

7  
8 The next slide is that same area. At three feet you can see the severity area of flooding  
9 increase on a coastal highway. These coastal highways are a real area of concern both for  
10 Maui. Oahu, we have similar issues especially on our windward east side. It's going to be a  
11 real challenge for everybody to figure out what to do, how to move these roads or how we're  
12 going to deal with it.

13  
14 Sea level rise is also going to have impacts to our critical infrastructure shown there in kind of  
15 turquoise color, I guess that is, purple is the Kahului Wastewater Treatment Plant which could  
16 be effectively be surrounded by chronic flood waters with three feet of sea level rise. It will also  
17 expand deep into our existing wetlands like Kanaha Pond there and the wildlife sanctuary.  
18 Next.

19  
20 We have severe impacts to our water quality. The white and red dots here are onsite sewage  
21 disposal systems in the Maalaea area. The red dots are OSD systems that are within the three  
22 foot sea level rise exposure area. Those sewage disposal systems could be compromised,  
23 worsening water quality if they're not managed or improved somehow. And you can see the  
24 increasing flooding. Kealia Pond, of course, already a wetland but that area will deepen and  
25 expand. If not, it should be given to grow ideally.

26  
27 It will also lead to economic damages to infrastructure or to land and buildings on our coastal  
28 plane. And this is Kaanapali at three-feet of sea level rise, sea level rise exposure area laid  
29 over the building values. And we get to the next slide, this shows the economic impacts if no  
30 mitigation measures are taken. This analysis attempts to get a dollar value of the impacts. It's  
31 done at the property level scale, but for demonstration purposes it's upscale these one . . .  
32 (inaudible) . . . or 2 ½ acre grid cells. These squares you see in the color coding is according to  
33 the dollar loss within that particular grid. With the orange ones you see between \$2 and \$10  
34 million in potential loss. It looks like we have some red-orange ones that are between \$10 and  
35 \$50 million of potential loss. Those would be of course a lot of the hotel properties in Kaanapali  
36 that could be compromised by sea level rise.

37  
38 Again, it's just taking that sea level rise exposure area, and laying it right over the parcel layers,  
39 the value layers that come from the County TMK data. So if you look up a parcel, get the value  
40 of the land and the building structure on there. Next slide.

41  
42 Okay, just go over some of these statistics. The overall results from the sea level rise report,  
43 taking these maps and compiling them up statewide at the island level. About \$19 billion loss of  
44 land structures, potentially vulnerable, question mark, and billions about how much more and  
45 loss of critical infrastructure, roads, pipe network, etcetera that could be at risk. I don't think we  
46 have a dollar value for that, but it's likely to be an order of magnitude greater than the economic

1 loss we get from buildings and land. 116 miles of road potentially flooded in the state. 6,500  
2 structure potentially inundated. Almost 20,000 people potentially displaced from those buildings  
3 and those lands if we don't adapt properly. And over 25,000, almost 26,000, acres of land  
4 within the sea level rise exposure area. As well as – sorry -- as well as over 500 cultural sites  
5 potentially flooded, compromised with sea level rise.

6  
7 This is looking at the impacts island by island. This is the area of flooded -- area flooded at 3.2  
8 feet of sea level rise, acres of land, island by island. Oahu, kind of eclipse the impacts. I won't  
9 say eclipse, but it's significantly greater than the other islands. About 9,400 acres on Oahu.  
10 Maui's somewhat lower. When you're just looking at acreage about 3,000 acres but don't take  
11 this the wrong way. It's still a significant impact. The reduced area, increase area for Oahu is  
12 probably primarily due to a difference in coastal topography. Maui has a little bit more elevated  
13 topography around its shoreline which could be beneficial if we're able to move things back out  
14 of the low lying areas. Next slide.

15  
16 Similar plot, but here looking at the number of structures flooded. 760 structures potentially  
17 impacted, chronically flooded, with 3.2 feet of sea level rise. This one, miles of road, about 20  
18 miles of road, potentially flooded with three foot of sea level rise on Maui.

19  
20 Over \$3 billion in loss, potential loss of land and structures with sea level rise. Again, not  
21 considering the infrastructure around that land. Next one.

22  
23 So we've been really focusing on the three foot, 3.2 foot scenario, but we could see more sea  
24 level rise in that in this century. It's possible from like that NOAA report I showed you, and the  
25 other scientists coming out. So it is important to consider higher scenario than just this three  
26 foot. In addition, sea level rise is not going to end at three feet. It will continue out into the  
27 following century so it's important to look at other scenario. What we're showing here is the 3.2  
28 foot scenario in blue. The purple is just a passive flooding with five feet. And you can see the  
29 increase in submerged area. I think it's about 25% increase in submerged area when we get to  
30 five feet of sea level rise. This five-foot scenario shown here does not include erosion or wave  
31 run off which would significantly add to it. But it shows how those areas expand in the back  
32 shore particularly as ground water begins to rise in the back shore. Okay, next one.

33  
34 Okay so that's some of the science and the modeling we do. I'm going to pass it back to Sam.  
35 He's going to talk about some of the recommendations and the next steps that we included with  
36 the sea level rise report.

37  
38 Mr. Lemmo: Thanks Brad. Okay. I'll be, I'll be brief here. Leave time for some questions  
39 perhaps. So one of the major outcomes of this report is recommendations, of course. We want  
40 to give people some tools with which they can do something about addressing the problem. In  
41 preparing the report and the recommendations, we did a really extensive literature review. We  
42 looked at existing tool kits and guidance documents around the state and possibly even  
43 elsewhere. One of them was the sea level rise adaption tool kit developed recently by the  
44 ICPP. We conducted two workshops on, on Oahu, very large attendance. We went to the  
45 counties and conducted meetings with the county directors and the public. We did come to  
46 Maui, and I believe we did a presentation for the Commission, the Council. Okay. And then we

1 also came over here and did a presentation for the general public. And then we were in a  
2 process of, you know, taking feedback from these groups. Next.

3  
4 So the report has nine recommendations and the main recommendation that we wanted to get  
5 out and sort of support because everybody talks about it is support sustainable and resilient  
6 development policies. There's so many things that go with the term sustainability and resiliency  
7 including sea level rise resilience and sea level rise adaption in the form of mitigation. So we  
8 ought to put it under these important terms that we are all very -- becoming very familiar with.  
9 The bottom line is you have to have as your core values these basic ideas. So you can then  
10 sort of do the detailed work that needs to be done to actually implement the changes that are  
11 necessary. So this island has a sustainability coordinator. I believe, it's Rob Parsons, the  
12 Mayor's Office. And all the islands have them. The State has one now and so we need to, we  
13 need to support these core values in order for us to move forward. Otherwise, we're kind of just  
14 talking and going through the motions.

15  
16 So from that comes the other recommendations. You can see we have included things that you  
17 probably would expect us to include. Limit new development inside the sea level rise exposure  
18 area that Brad just talked about. So we don't want to --. You know, once you've identified the  
19 areas of like inundation, we do want to try to develop policies and mechanisms to sort of direct  
20 development away from those areas. In some cases we can't do that. Where we have large  
21 investments, we may have to flood proof for a while until we can essentially phase them out of  
22 there.

23  
24 Another one is this idea of smart urban redevelopment outside of the sea level rise exposure  
25 area, so we get a lot of attention to this idea of smart development. It's one of those sort of  
26 attention grabbers for sustainability. And it's a lot more in the smart development movement  
27 than just adaption in sea level rise. A lot of things having to do with conservation, right?  
28 Building, making building, LEED buildings that conserve energy. Building communities where  
29 we use less land so we tend to create cluster developments rather than going with the typical  
30 subdivisions that we have because that leads to other problems. More people have to have  
31 cars. So we can kill a number of birds with one stone by doing smart development. We can  
32 address our transportation issues, we can address our energy issues, we can have better, more  
33 functional communities, we can reduce our carbon footprint, take a shot in adapting to some of  
34 these climate challenges and we'll all be in a better place.

35  
36 And, of course, flood risk management. We need to basically consider how does the current --  
37 how does the current flood management system serve us and do we need to make any  
38 changes to it? We, of course, the typical response is, well, we shouldn't give flood, we shouldn't  
39 make flood insurance available for areas that are going to be eroded because that just  
40 encourages people to maintain a presence there. So there's repetitive loss is being happening.  
41 Constantly, this is going on throughout the country. But there's also --. But that's not really . . .  
42 (inaudible) . . . you know we have to get from here to there. We have to bridge these things.  
43 So one idea is maybe we can try to encourage maybe self-insure. Like some of these  
44 communities that are experiencing extreme threat from sea level rise, maybe we can look at  
45 areas in SLRXA and basically say if you're in a SLRXA we're really encouraging you to get self-  
46 insure yourself. That way if everybody buys insurance in this area and sort of do a private

1 insurer, and then if maybe somebody faces a loss sort of scenario, then that person can get  
2 made whole from the money in this insurance fund. Just some, you know, novel ideas that  
3 we're trying to throw out there. Can you flip it again, Jim?

4  
5 One of the ones that are geared to my heart is this enable the legacy beach program. My office  
6 is in the business of protecting beaches as is your coastal zone management office. And  
7 beaches are being threatened by sea level rise, but the problem with beaches is that we built  
8 too close to the ocean. You know, it's very frustrating and difficult for us to do our job because  
9 of the decisions that were made decades ago about the placement of structures in areas that  
10 are subject to severe coastal hazards. I mean, I don't blame them. They maybe didn't have the  
11 information that they needed at that time to do it differently and that's the way it was done. And  
12 we have some significant and severe challenges that we are facing now and in the future. The  
13 problem is ridiculously gigantic. I mean, you know, you saw Jim over Maui. Just kind of a  
14 handful of significant challenges here. This is, this is happening on Kauai and on Oahu. It's a  
15 nightmare, and it's really, really hard and challenging to manage this situation. But and in some  
16 cases we're going to lose coastal resources. We know that. But there are going to be  
17 opportunities where we can save what we call legacy beaches. You know, the big beautiful  
18 beaches that everybody loves. I don't know where they are exactly on Oahu. I mean, on Maui.  
19 Maybe some of your north shore beaches. Well, how do you do that?

20  
21 No. 1, you don't approve any more high density urban development for these areas, right? You  
22 don't take land zoned as agriculture and change it to urban in these areas. We identify these  
23 wonderful beach resources. You don't make your zoning system, you know, less restrictive.  
24 You look at places where you can take do remedial actions to essentially move people away  
25 from some of these areas where you have these beautiful sandy legacy beaches. Because the  
26 problem is that what you see on the beach is the sand. But behind the beach there's a ton of  
27 sand in the sand dunes. They've all been built on. So let's work to like move development out  
28 of some of these areas so that we can allow the beach to migrate in a land ward direction  
29 because of sea level that's what's going to happen. Sea level rises, the beach is going to move  
30 inland. If there's a structure there, they're going to build a seawall and the beach is going to be  
31 loss. If there's nothing for the beach to encounter, the beach will persist for several generations.  
32 We have to develop a strategy to protect some of our critical beach assets. We're looking at  
33 this for the north shore of Oahu by the way. The seven mile miracle is being threatened  
34 because of development and sea level rise.

35  
36 Water quality...native Hawaiian culture and community. This is very challenging for us because  
37 so many native Hawaiian resources are located along the shoreline. It's not just fish ponds, you  
38 know. It's archaeology. It's cultural sites. It's cultural landscapes. They're going to be lost  
39 forever. We can't stop that. We can't stop the sea from rising. Maybe we can slow it down, but  
40 we can't stop it. So we need to figure out a way to protect these critical, local, native Hawaiian  
41 resources so that they're not lost, you know. And so ways to do that, I am totally open for  
42 discussion. One guy talked about maybe moving some fish ponds inland even. But certainly  
43 we need to engage in a dialogue with important -- you know, the native practitioners to see  
44 what's the best way to approach this serious issue. Go ahead. Next. Not working?

45

1 Oh yeah, okay. Financing and incentives, well you know, everybody's saying well this is crazy.  
2 This is going to cost too much money right. There's no way that we can afford to adapt to sea  
3 level rise. We can't move Kahului, Wailuku waste water treatment plant. That was the, that was  
4 sort of the watch word at that time. Something like a couple hundred million dollars. And so  
5 they decided to build the seawall and worry about it later. We have roads that are being  
6 constantly undermined and threatened around the state . . . (inaudible) . . . highway,  
7 Launiopoko, same problem. DOT comes down and they say it's going to cost us a billion dollars  
8 to move that highway. Everyone goes can't do it. You know, so, you know, we got to get out of  
9 the practice of saying what we can't do and try to figure out what we can do, right? And start to  
10 do whatever it takes to sort of like us getting going down that road. And find ways to finance  
11 things and, and make the changes. I think that if we stop saying that we can't do it, and say we  
12 can do it, it will get a little cheaper.  
13

14 So we need to support research. And we got to continue --. It's easier to say no. It's harder to  
15 say yes, but that doesn't mean we shouldn't. So research assessment monitoring, we have  
16 wonderful relationships with the University of Hawaii and our other counter parts, and we want  
17 to continue doing this because sea level is not a static thing because we map 3.2 foot of sea  
18 level rise don't be misled by that. It doesn't stop there. It gets much worse. We're only, we're  
19 only sort of showing you what we're able to deal with at this time. And the reason we need to  
20 keep doing monitoring and science is because it is changing, the science is changing, and we  
21 need to keep abreast of that, and figure out how to best address those issues in the future.  
22

23 And then collaboration. I talked about it earlier. I don't know why there's 10 here. There's only  
24 supposed to be nine. Did you add one Jim? This is an old slide. We had 10 and then we  
25 dropped it to nine. So anyway, the last one is to promote collaboration and accountability. So  
26 the collaboration is very clear. We do need to collaborate better. We got to quit stow piping,  
27 right? We got to quit like living at our own silos and going about our business without due  
28 respect what other people are doing. We need to really reach out and try to sort of join arms  
29 and figure out, figure out a way forward as a group, as a team.  
30

31 And then accountability. How do we hold ourselves accountable...to like make, start to make  
32 the changes necessary to reduce the effects of these problems that we're going to face? That's  
33 a good question. I don't know. Yeah, so this is a little map of just sort of idealized diagram of  
34 some of the things that we should be looking at for sea level rise adaptation. And sort of that  
35 little shaded area along the coast is the SLRXA. I wanted to tell that joke. I won't do it. So we -  
36 -. Yeah, so the SLRXA, we're trying to show you where the recommendation may be applied in  
37 the context of land use. And so just really the main thing is maybe we can just recognize this,  
38 this SLRXA as a State vulnerability zone, right. People say this is a State vulnerability zone,  
39 we're going to use this. We've mapped it for you. It's all been scientifically, you know, vetted  
40 rigorous. There's research papers being written on it. It's a really strong, sort of -- it's a really  
41 strong sort of layer, so let's say this is going to be the layer that we're going to use as guidance  
42 for us in future decisions regarding land use, in community development. That's the first thing  
43 we can do, and you know, the Mayor has done that -- bless his soul -- by basically writing a  
44 proclamation and also by accepting the bases and the recommendations of the sea level rise  
45 report. And we really thank Mayor Arakawa very much for that. Perhaps the other Mayors will  
46 follow suit. Anyway, you can go on. I think they get the idea.

1  
2 So our next steps. I talked about this a little bit at the beginning of my presentation and we're  
3 just, this Commission is tasked to look at everything under the sun. We're not, they're not just  
4 tasked to just look at sea level rise. They're supposed to look at the problem of acidification of  
5 our oceans, the problem with the health of our marine ecosystems and our reefs. They're  
6 supposed to look at public health. They're supposed to look at heat and how things are going to  
7 get warmer in the future. And then they're also looking at rainfall. You know, we're going to  
8 have some serious, potential challenges here with some of episodic sort of flooding. Feast,  
9 feminine, and flooding. And so we want to look at all of these things, but they're also looking at  
10 mitigation.

11  
12 And so I just want to say one more thing about the mitigation part that is very critical. The  
13 Mayors just recently got together and sort of signed a proclamation or agreement to like convert  
14 internal combustion engines to electronic vehicles (EV) by 2045. And this is a very powerful  
15 statement being made by the Mayors and so one of the purpose of the Commission is to  
16 investigate how we can actually do this. Convert the State fleets, the County fleets, then move  
17 to the private fleets. And so this is one of the major goals of the Commission this next year is to  
18 formulate sort of informal working groups to figure out how we can make the change to EV, you  
19 know, in a short of time as possible because you know we are running out of time on the global  
20 warming issue. And we need to make changes now in order to maintain a very small carbon  
21 footprint to reduce the potential warming that we are facing. So the Commission is multitasked.

22  
23 By the way the Commission meets four times a year, which is not very much because it's a  
24 huge body. And, but we are going to be taking up a lot of business at these meetings, and try to  
25 make some really key decisions to move the ball forward. I think that's pretty much it for me  
26 again. Okay, I'm going to have Brad up again.

27  
28 Mr. Romine: Okay, so we finished this sea level rise report, and we're all asking what's next,  
29 what are the next steps? Sam shared some of those. The planning commission is working to  
30 kind of prioritize some of the recommendations from sea level rise report. But we do have some  
31 ongoing work to take the data and the recommendations from the report, the next step. It's  
32 already underway. We, University Hawaii Sea Grant Program partnership with the DNLR and  
33 the State Office of Planning, got some funding through the NOAA regional resilience grant  
34 program for a project that runs up to 2019. This money is being used for three projects.

35  
36 The first was to develop the Hawaii sea level rise viewer which I'm going to do a brief demo for  
37 you in a minute which is meant to be an online web based atlas, interactive atlas for the sea  
38 level rise report.

39  
40 The second project is developing guidance for addressing sea level rise and coastal hazards  
41 planning in the community planning process. So as you know, all the counties are required to  
42 do general plans, community plans. We really see that as an important step where the rubber  
43 can meet the road, where we can take this data. The first step, we take this data down to the  
44 community level and start to work with the members of the community, the local government  
45 agencies, and we're working closely with the Maui County Planning Department, to figure out  
46 how to integrate this data, and recommendations, and other initiatives into the community  
47 planning process.

1  
2 And then the third project we're doing is developing guidance for streamline and resilient  
3 disaster reconstruction. The sea level rise report looks at chronic hazards. Hazards that are  
4 going to happen at least once a year or more often. We're going to have these disaster events,  
5 flood events, hurricanes, tsunamis, and those provide potential opportunities. While they are  
6 severe damaging opportunities to rebuild smarter, more resilient to these future disasters that  
7 are going to get -- where the impacts are going to get worse with sea level rise and climate  
8 change. And we're doing that project, building on the great work that was done by Jim and Tara  
9 Owens, their project looking at disaster reconstruction at Maui County.

10  
11 So we shift gears here, a little bit here to talk about our Hawaii --

12  
13 Ms. Duvauchelle: Excuse me? Excuse me, before you continue I think we're going to take a 10  
14 minute break.

15  
16 Mr. Romine: Sounds great.

17  
18 Ms. Duvauchelle: Sorry, thank you.

19  
20 *(The Maui Planning Commission recessed at 2:23 p.m. and reconvened at 2:34 p.m.)*

21  
22 Ms. Duvauchelle: Thank you very much for your patience. Planning Commission is now back in  
23 session, if you'd like to continue. Sorry for the interruption.

24  
25 Mr. Romine: No problem. That was well timed. Thank you for bearing with us. I know this is a  
26 rather long presentation. We really appreciate all of the time you're giving us Madame Chair  
27 and Commission Members. I just want to take about five more minutes just to demo the Hawaii  
28 sea level rise viewer for you all. This is, again, meant to be like an online, interactive  
29 companion atlas to go with the sea level rise report. This viewer is available online at  
30 hawaiiisealevelriseviewer.org or you can go through the PacIOOS website who developed this  
31 tool for us. That's Pacific Island Ocean Observing System (PacIOOS) that hosts this website for  
32 us and developed it for us.

33  
34 It starts out on this home page. You can go to view the whole screen by clicking on that  
35 showing all of the islands. The ones in yellow are the ones we have data for from the Hawaii  
36 sea level rise report. You can zoom to any particular island. We'll look at Maui. Zoom in there.  
37 On the right hand side is your interactive legend where you can click on different layers. Right  
38 now we're showing grayscale map layered. There's also satellite base map and digital elevation  
39 model if you want to look at topography. I tend to prefer the satellite. You can zoom in further  
40 to a particular area. Anybody want to pick an area? I heard north Kihei first. Sorry, I heard  
41 north Kihei first.

42  
43 Okay so all of the exposure layers are available on here versus the sea level rise exposure, the  
44 SLRXA. It varies in intervals from half a foot up to 3.2 feet. There's the sea level rise exposure  
45 area for that north Kihei section. And then you can look at the individual components that make  
46 up that SLRXA individually. The passive of flooding. These are just showing one at a time.  
47 That's a passive of flooding. Mostly confined to the shoreline for that area. Annual high wave

1 flooding, you can see some over wash particularly in the north area. And then the coastal  
2 erosion which in this case shows as lines rather than areas. Anything seaward of those line  
3 potentially exposed to coastal erosion at those heights. And you can zoom in and out well into  
4 it. Even down to property level even. And you've got a legend here on the left. Any point you  
5 have a question about one of these layers you can just roll over that information bubble. It  
6 opens up. You can also click on it and it will take you down on the same page but below that  
7 viewer it gives you some background description on that particular layer. And this is just taken  
8 from the sea level rise report. More detail in the report of course. There's also a location under  
9 each layer description to download the data if you want to bring it into your own GIS program,  
10 for those of us that are savvy with GIS, the planner folks.

11  
12 Back to the top, some of these other layers pulls up the exposure. There's the vulnerability  
13 layers, the economic loss impacts. I should zoom out on this. Oops, go to another area.  
14 Kahana? Okay economic potential loss; we'll just show you how that works. There's the 3.2  
15 foot sea level rise exposure area. And then the potential economic loss from that 3.2 foot again  
16 showing those dollar values with those . . . (inaudible) . . . grids. And the darker orange is  
17 they're being over 10 million potential loss per . . . (inaudible) . . .

18  
19 There's some other overlays we put in here just for reference to help support planning and just  
20 for information dissemination. Community plan areas, I won't put that one. But that just shows  
21 where your community planning areas are done. We're hoping to have this integrated in some  
22 of those community plan updates. Your flood hazard zones. I should turn this off. Those are  
23 present day not with sea level rise. We included some layers like back shore geology, you  
24 know, maybe understand, you know, potential for beaches to exist if stuffs are moved out of the  
25 way for beaches to migrate back landward.

26  
27 And that's pretty much it. I'll leave it at that. I think I'll leave it there.

28  
29 Mr. Dack: Chair, this is the time when we suggest that you might have some questions and  
30 answers from the Commission of the representatives from the State. Because after they're  
31 done we'll go back into Maui things and particularly relevant to the Commission.

32  
33 Ms. Duvauchelle: Okay, thank you very much. All right, the time Commissioners, questions for  
34 the DLNR guests? Comments? Discussion? Commissioner Kahu Hill.

35  
36 Kahu Hill: Aloha. Mahalo for presenting this to us today, and all of us our big island earth and  
37 Hawaii. I wanted to know on this particular program, on this site, if there is in place now or if  
38 there could be in the future with the technology that you've done and that you're doing to  
39 actually be able to put a tax key code or be able to put in a particular property. Sorry for the  
40 analogy -- but kind of like going in to a pharmacy, you're on something and they give you a new  
41 prescription and they'll see if there's any red light or if there's conflict. And so that you could  
42 actually plug it into the system and see a particular property and what's being designed or  
43 what's being asked of the Commission or permitting in regards to that.

44  
45 Mr. Romine: The viewer does not have that function at this time. Like you're suggesting maybe  
46 a search function, you have the TMK layer over there you can search the property. We don't  
47 have that at this time. It is within the realm of possibility. It could be developed. I guess the



1 reason it wasn't included was that we were kind of following the goal of the sea level rise report  
2 was to provide more of an overview picture of what sea level rise is. So, there is again the  
3 ability to download this data and put into another viewer, or a GIS program and overlay that with  
4 the TMK layers. But at this time, we don't have that or the funding to do that at this moment.  
5

6 Mr. Dack: Chair, if I might add to that? The County has been working for years now on an  
7 enterprise wide geographic information system that will be linked or a replacement to our  
8 current permitting software called KIVA. It's called a MAPPs project; Maui Automated  
9 Permitting Planning System. You may or may not have heard of. But anyway in a couple of  
10 years we will be rolling out the GIS with the kind of capabilities you're asking about  
11 Commissioner, and we will be able to take layers like this and superimpose on to it. So we  
12 expect to be able to have that functionality at some point.  
13

14 Kahu Hill: Mahalo.  
15

16 Ms. Duvauchelle: Thank you. Commissioner Carnicelli.  
17

18 Mr. Carnicelli: Yeah, I just have a quick question about the interactive part of the website here.  
19 So when we click on --. I mean, because I've played with this a little but the part I'm guessing or  
20 I'm asking about is if I click on say exposure area 3.2, and then I go to passive flooding at 3.2,  
21 and then I go to coastal erosion at 3.2, do those all act independent of each other or if I click on  
22 all of them then it's going to add on to each one? Like I mean if I add all three of those together  
23 I'm assuming that the impact is going to be way greater than if I isolate any one of them in and  
24 of themselves so does that --? When I click on that is that going to exponentially increase them  
25 as I layer them or is they are all going to be kind of just layered as each one in and of itself if  
26 that even makes sense?  
27

28 Mr. Romine: Yeah, so that sea level rise exposure area, that top layer there is a cumulative area  
29 of the erosion passive and wave over wash so they don't -- they're not multiplicative. It's just an  
30 overall footprint of those three hazards. So, does that answer your question? Does it make  
31 sense?  
32

33 Mr. Carnicelli: Yeah.  
34

35 Mr. Romaine: Okay.  
36

37 Ms. Duvauchelle: Commissioners? Commissioner Robinson.  
38

39 Mr. Robinson: Jim? Is Jim you had a comment earlier about it's up to this Commission to  
40 decide what happens because it's in our purvey, and I guess my comment is we can't decide  
41 anything if nothing comes to our Commission. I think the people who decide are legislators and  
42 the people that hopefully have some courage that get some ideas out there. All we're able to do  
43 is to say it's a good idea or it's not a good idea.  
44

45 Mr. Buika: Correct. But as far as development. Excuse me.  
46

1 Mr. Robinson: Okay, so if we have the ability to have budgets and give proposals I think that  
2 would be great for our Commission, but that's not our, that's not in our ability or is there  
3 something that, that we can, we can then send letters to somebody to help do something?  
4

5 Mr. Buika: Well maybe the Director could comment, but I think, I mean as many any other  
6 actions you do send letters, right, to like Council for funding or different projects, I mean support,  
7 right. But as far as --. I mean, your authority is with the Special Management Area Rule for the  
8 Maui Planning Commission.  
9

10 Mr. Robinson: Right, with the approval. Yeah with the approval, but not with the proposals.  
11

12 Mr. Buika: Correct.  
13

14 Mr. Robinson: Unless there's something that, that I missed. Well, is we can only approve what's  
15 been proposed to us, but our Commission can't, aren't allowed to just on our own,  
16 independently say, you know, we'd like to see something happen because --. Can we request  
17 as well as approve?  
18

19 Mr. Spence: Well, it depends on what the request is.  
20

21 Mr. Robinson: Right. I mean, if it's in the budget. Like I said, I guess, like I said, our  
22 Commission only has so -- you know we'd like to approve more things but we can only get it  
23 when something comes through us to do it that way. I want to make sure the public understood  
24 that we're the authority for approval, but we're not the authority to make things happen. We'd  
25 like to be, but we cannot.  
26

27 Mr. Buika: Correct. Yeah we --. Do you have comments Will?  
28

29 Mr. Spence: No, you're the authority for approval, and as this Commission has experienced  
30 some time you're the authority for denial, and or something in between. When this body is in its,  
31 you know, quasi-judicial function you have a lot of authority for the things that you've been given  
32 authority for.  
33

34 Mr. Buika: Right, we have, you have -- I hate to say it -- but it's more of the reactive planning  
35 process, parcel by parcel we approve things on the shoreline, you know, whatever it is.  
36 However, you know this body did with the Hololani project, they pushed Hololani to participate in  
37 the greater regional beach nourishment project as conditions on their project also. So that was  
38 the way of looking more on the beach cell or regional level. And yeah, and what I experience or  
39 have experienced is that all the shoreline issue comes through you folks as the Maui Planning  
40 Commission. But to do projects, like the one project we have for sand study for Kahana Bay,  
41 we had to ask obviously for money from the County Council to do that. And rarely --. But the  
42 point I was making at the end is the buck stops here. Rarely do we ever take any projects on  
43 the shoreline or any SMA to the County Council. It ends here. So the exposure of the County  
44 Council to these types of issues is much less than what you're exposed to. So all of sudden  
45 we're asking, like with the sand study for that project, we had to educate the Council Members  
46 that there are issues on the shoreline and that we need some special funds from the County  
47 Council to accelerate the beach nourishment project by looking for sand. So it's almost like

1 ships passing in the night is that they're not exposed daily to these types of issues like you are.  
2 But they're the body that we go to fund to, at the County level, to fund projects. And then Sam  
3 eluded to all the more problematic higher level, bigger projects at the State level that we  
4 obviously have to do pro-active shoreline planning needs to come from the State level in my  
5 opinion.

6  
7 Ms. Duvauchelle: Thank you.

8  
9 Mr. Robinson: Okay. Actually I have just a question for Sam. So Sam, you gave a lot of  
10 examples of how we should look forward, is one thing I didn't notice in the presentation was of  
11 us backfilling some of the property that's been, that's been exposed. You know instead of  
12 retreating, can we go forward? I mean, there's different places that has levees that have, you  
13 know, a lot of places have high sea levels in their cities especially with our coastal. You know, if  
14 we're going to, if we're going to replenish beaches are we able to put, put a . . . (inaudible) . . .  
15 going above 100, or 300 feet out and replenish higher that way? Is that something that you  
16 guys looked at also instead of retreat?

17  
18 Mr. Lemmo: Yeah, we didn't specifically talk about . . . (inaudible) . . . but we do talk about  
19 adaptation and place which is that.

20  
21 Mr. Robinson: I'm saying like Magic Island. You know, something like --?

22  
23 Mr. Lemmo: Yeah, you know, let me give you an example, Waikiki. Okay, Magic Island is fine,  
24 but let's just go right to, you know, the 800 pound gorilla in the room, which is the economic  
25 engine for the state. I hate to say that, you know, Maui out here, but, you know, reality is it  
26 generates almost half of the tourism for the state, provides a significant amount of the state, the  
27 state gross product. So Waikiki don't need to deal with the rising of the sea level because it's  
28 really not that highly elevated. So what are you going to do? Well, you could build, you can  
29 fortify the shore front with giant bulk heads, okay, and maybe try to do some flood proofing in  
30 the back shore area and pump water out like they do in New Orleans. But that may not be  
31 feasible for us because we have different geology. We don't have sedimentary geology where  
32 you can seal it pretty well and then pump out the incident water coming in. We have the very  
33 porous sub strait so it may be very impossible to do that. So we don't even know if we can do  
34 that. So the other thing is maybe we should just refill the area, raise the grade, okay. You  
35 know, Waikiki is built on fill material, right, as is Ala Moana, possibly areas on Maui that I'm not  
36 aware of that are built on fill material. You dredge and then you dump the dredge material to  
37 raise the print, so maybe we could do that. We can raise Waikiki by six feet over time. That  
38 gives us another century maybe. So, no, we seriously need to consider what we can do to  
39 maintain some certain critical resources in place.

40  
41 Highways are another one. There may be places like where we can move the highway right  
42 now. Launiopoko is easy right? You know, open old cane fields. But you go to Kaawa on the  
43 island of Oahu, solid homes, highway in severe stress. What are you going to do? Well, I think  
44 we're going to have to basically build out a little bit actually in the short-term, and build up a few  
45 feet, and deal with the drainage concern somehow. But we got to keep that highway functioning  
46 for, for a few more decades. So that's the kind of --. We're looking at all of those -- we need to  
47 look at all those things. This isn't like an automatic, like, you're in the SLRXA you need to

1 move, you know. No, the SLRXA identifies the threat, and what's threatened. And then you  
2 decide what mechanism you want to pursue to reduce your exposure. You could move, you  
3 could build higher, you could, you could fortify. Sorry for the long answer.

4  
5 Ms. Duvauchelle: Thank you. Commissioner Higashi.

6  
7 Mr. Higashi: Sam, since you're up there. I think we got a lot of information about shoreline  
8 getting loss, etcetera. However, I think the crisis is now. It's not 20 years from now. I've been  
9 on Maui and Honolulu for 60 years and I've seen sand disappear. Example, Kalama Park, in the  
10 late 40's and early 50's, we had 20 to 50 feet of sand shore. Baldwin Park in Paia used to have  
11 40 to 50 feet of sand shore, it's gone, and yet we still have studies, University of Hawaii making  
12 comments about climate change. We know about the melting of the glaciers which rises the  
13 ocean level. But the bottom line is we are right now, in the Commission, we're doing what we  
14 call piece meal, band aid work. We take a property. If that property owner has the money,  
15 they'll spend \$400,000 to make a seawall or whatever. But the neighbors cannot afford that.  
16 So my question to you is, do you have a remedy that you seen happening successfully  
17 somewhere in the world, United States, wherever, like South Carolina, North Carolina where  
18 they've saved seashore without spending billions of dollars?

19  
20 Mr. Lemmo: Good question. I believe people have been looking at Miami, and Brad just was in  
21 Miami for some business what they're doing in Miami is they're raising the streets, like, I guess  
22 when they have to repair or replace roads or whatever they do in Public Works. They've been  
23 raising the streets like three or four feet, and then they're using these kind of elaborate pumping  
24 systems right where they're pumping water. They call it sunny day flooding. No rain, but  
25 because sea level rise is here, and of course it's worse on the east coast for a number of reason  
26 having to do with the gulf stream. The water just comes up through the sub-straits, very porous  
27 sub-straint, similar, I think it's a little similar to what we have here, but different, different geology.

28  
29 So they get sunny day flooding and then they pump the water out. And they use reverse, what  
30 they call a reverse draining where the water can come in but the --. The water goes out, but  
31 can't come in. So they kind of do these measures, but you know, I'm being told that that's  
32 causing other problems. It's pushing water into areas that aren't being, you know, raised  
33 obviously. And of course at some point that will only work for so long. At one point, at some  
34 point you won't be able to live there any longer. The reality is, in my experience in dealing with  
35 this is that there is no silver bullet for managing sea level rise because we've never had to deal  
36 with a problem like this, right? We just never had to deal with it. This is, this is unprecedented  
37 in human history.

38  
39 Mr. Higashi: This is why I asked you was in the late 80's I had a staff member that was going  
40 into a career other than teaching and he had contact with a Japanese company that was  
41 working in South Carolina or North Carolina. And what they did in essence was they had these  
42 big concrete, I don't know, circle type of kind of that they inserted artificial seaweed, like 25, 50  
43 feet. And they found that they could save the shoreline because the ocean waves would break  
44 away from the shore rather than close to shore, eroding the sand.

45  
46 Mr. Lemmo: Yeah, that's fine, but it doesn't, it won't work for us because when --. We have a --.  
47 You know Brad can talk about this, but I'll just, in the spirit of time, we have, we have our ground

1 water here and the water table, and the water table is you know sits on top of the saline, I  
2 guess, the sea water table. And then basically what happens is when sea level rises or even  
3 tides change, the water table changes elevation. So there are times when sea level rises or  
4 tides become very high that the water table is actually now percolating out into the open ground  
5 and flooding wetlands. So this is in many low lying areas around the State, you know. And so  
6 how do -- breaking waves is just a part of the problem here. How do you deal with the water  
7 that is percolating up through the ground when you have higher tides or higher sea level rise?  
8 We don't know what to do about that. You can't --. You know, at some point you can't live in a  
9 wetland.

10  
11 You know, the waves coming in are another problem right? Because you have breaking waves  
12 and you have stronger waves coming in when the sea level is higher, right, because they're not  
13 impeded by reefs.

14  
15 Mr. Higashi: There's another one in Barber's Point area, where, I guess it's the Army Corp of  
16 Engineers that built the T-level type objects and they saved the sand in the Ewa area. Are you  
17 folks familiar with that particular project?

18  
19 Mr. Lemmo: Is it on the Army property? Oh, you're talking the Ilikoi Point.

20  
21 Mr. Higashi: Ilikoi Point.

22  
23 Mr. Lemmo: Yeah, that was actually a great project. Yeah, that whole point, Ilikoi Point was  
24 having significant erosion. I mean it was really bad, to the point where they were actually  
25 removing homes from the area. And one of the conditions of the lease between the, I guess,  
26 the Navy and lease who bought the property to then run it -- I forgot the name of the company --  
27 but was to do a beach restoration project. So it was like a \$12 or \$14 million project, it took 10  
28 or 12 years to permit, and it's working really well. But you know it was sort of like it was an easy  
29 deal there because the coastal geology on it was fairly simple and they had a sand source right  
30 there. So they had 90,000 cubic yards of sand right there. All they had to was pick it up and  
31 move it. So it was a very simple project, and it's working very well. And that will actually protect  
32 them for, for a while. Yeah, so maybe pushing the beach out in some cases might, might help.

33  
34 Mr. Higashi: Yeah, thank you. I just wanted to ask you whether there was any renewal of that  
35 we can address to take care of shoreline erosion now because we have the major problem here  
36 as well as statewide I'm pretty sure.

37  
38 Ms. Duvauchelle: Thank you. Any other questions, comments for our guests? No? All right,  
39 thank you both very much for being here. We really appreciate it.

40  
41 Mr. Spence: Thank you Sam.

42  
43 Mr. Lemmo: Thank you very much.

44  
45 Mr. Spence: Thanks Brad.

46

1 Ms. Duvauchelle: Jeff, is it going to take you a few minutes? Shall we break? Okay. We're  
2 going to break.

3

4 *(The Maui Planning Commission recessed at 3:02 p.m. and reconvened at 3:04 p.m.)*

5

6 Ms. Duvauchelle: All right, I'm sorry. Thank you very much. Go right ahead.

7

8 Mr. Dack: No problem. Again, I'm Jeff Dack with the --. I work for the shoreline team in the  
9 Current Division of the Planning Department. You just heard --. You heard --. You saw already  
10 kind of -- reminding you impacts of what's happening on Maui shorelines right now from Jim  
11 earlier. You've seen the big picture from the sea level rise report. Now we're talk a little bit  
12 more about what I think one Commissioner asked what can we do? And what can the Maui  
13 Planning Commission do? What the County can, what can the Planning Department do?

14

15 So there's a few things we'll talk for the last part here. There's a little bit of an agenda. We'll go  
16 through a discussion of shoreline setbacks as we have them right now. Talk about current  
17 historical erosion rate setbacks that we have and a couple of alternatives for how we can  
18 incorporate the effects of sea level rise into our setback policy which is not in right now. We'll  
19 talk about a little about a future chronic coastal flooding, some of the adaptations that the  
20 Planning Department is working on, and then community planning. That's a really big deal  
21 because that's how you're going to be address -- address the issues in a bigger picture  
22 standpoint. And then an opportunity for public testimony at least as part of the agenda item. I'm  
23 sorry kind of late. And any last Q&A. So that's the rest of the, the rest of the afternoon as we  
24 see it.

25

26 But first this proclamation from the Mayor recently signed. It takes, it takes some reading. It's a  
27 bridge between the report and the presentation that you just heard, and Maui County. And Maui  
28 County's commitments to follow up on all of the great information that you heard and with all,  
29 and begin to -- well begin -- continue to deal with the risks and exposures that we're facing.

30

31 And bear with me, I'm going to read the resolution part of this because this is really, really  
32 critical. It says provides --. It almost writes say like a vision or mission statement for the County  
33 with regards to how, how -- what we should be doing to be addressing sea level rise with the  
34 impact you just saw.

35

36 So just seven items here. The Mayor acknowledged the growing volume of scientific proof that  
37 the climate change is real. Impacts of climate change greatly threaten humans and other  
38 species, economics, infrastructure, etcetera. The Mayor's proclamation accepted the report that  
39 you just heard a presentation on. And the data viewer that you just as providing relevant and  
40 up-to-date scientific assessment of the State's coastal areas, and along with recommended  
41 actions. It acknowledges that exposure that he was referring to, the SLRXA area 3.2 feet, to  
42 depict hazards that may occur, the mid to latter half of the century, as early as 2026 when you  
43 see those things happening. And that they are to be used now for planning purposes. That's  
44 critical. The Mayor is saying we should be doing, we should be planning for those things right  
45 now. They're going to be happening soon. In the proclamation is intended to place height  
46 intention on how sea level rise may impact Maui County, its people, communities, investments,  
47 culture, history and natural resources. Direct the Maui Department to use the report in all our

1 plans. So the West Maui Community Plan being updated now is going to be taking the  
2 information report and incorporating sea level rise concerns into that. Programs, directing the  
3 capital improvement. Not just the Planning Department but directing all departments to be  
4 considering the report in capital improvement decisions. Where shall we be building things,  
5 where shall we not be building things, where shall we be spending your tax payer's dollars in  
6 order to mitigate infrastructure and critical facilities that will be impacted by sea level? Including  
7 relocation of infrastructure and critical facilities. These are big ticket items. They're a big deal,  
8 but we, again, we have a strong direction from your Mayor that this administration and this  
9 County is to be working on these. Direct the Department of Planning to propose revisions to the  
10 -- in this case -- the Maui Planning Commission shoreline rules to incorporate sea level rise. I'll  
11 be talking about that in just a moment. And then urge officials of all levels to view climate  
12 change and need for climate change adaptation is pressing matters, take practical approach.  
13 So that's a pretty strong statement. Again, a bridge between what you just heard and what we  
14 should be doing on a bigger picture on a variety fronts in Maui County.  
15

16 In the Planning Commission, in the Planning Commission's purview -- well, not just the Planning  
17 Commission but there's a --. Jim actually mentioned this. He didn't have slide in front of him  
18 unfortunately when he spoke to you earlier, but there are set of these, kind of six bolded items  
19 that provide a basic menu of things that, of ways that you can respond to coastal erosion again.  
20 And this might be exacerbated by sea level rise.  
21

22 We're going to be talking about a little bit with regards to the authority and the purview of the  
23 Commission. First, you could do nothing. Well, that I would hope after we all seen that  
24 presentation we realized that's not a feasible option. Manage retreat is the second one. We'll  
25 talk about the -- and that's where setback policy in the direction to look -- incorporating sea level  
26 rise into our setbacks comes into effect where you do have some purview. And then there's  
27 others. We'll talk about adaptation, beach nourishment, temporary erosion control, and we don't  
28 want to really talk too much about . . . (inaudible) . . . But you know about that because you've  
29 had to deal with, for example, the Hololani Condo situation. That's the worst case decision if all  
30 else fails.  
31

32 But first we're going to talk about, again within your purview, setbacks and particularly the items  
33 where you have regulatory control within your shoreline rules. We're going to address those a  
34 little bit and introduce some options to you. And we will need to get your feedback and be  
35 coming back to you later.  
36

37 So shoreline setbacks. We're going to talk about shoreline setbacks to incorporate sea level  
38 rise as I mentioned. First off I want to give -- a lot of you are probably aware of it but it is a little  
39 complicated even how our current historical erosion setback works. But we've had a historical  
40 erosion setbacks for shoreline structures in place since 2003 when the Commission first  
41 adopted them. And they're based upon historical rates of erosion and they have --. This is the  
42 formula that's in your shoreline rules. And the first is we take the time frame of 50 years. So  
43 we're looking at a setback that should supposedly accommodate 50 years of erosion at least  
44 according to historical basis. And that was based upon a life expectancy of a structure which  
45 may be a bit low now. But that's the formula that's been in place since the Commission adopted  
46 it 15 years ago. The formula then takes that number of years and multiples it by an annual

1 historical erosion rate. And I'll talk a little bit in a moment on how that actually gets, gets  
2 developed. And then, we add to that a small buffer of a minimum setback.

3  
4 Now I did mention the historical rate. That's takes a little --. It's a little bit complicated. But you  
5 also saw some similar, similar mapping where you had these various different colored lines.  
6 And one of the things that Dr. Fletcher showed us. But to get a historical rate the same folks  
7 who did a lot of the science for the presentation you saw, they've been working on this for, these  
8 things for 20 years or more. The School of Ocean, SOEST, School of Ocean, Earth Sciences --  
9 I'm missing the full explanation -- with the University of Hawaii. And one thing they did for us is  
10 about 20 years ago they had some students do a project that have ultimately turned into your,  
11 into the setback formula that got adopted. But the way to do this is we take -- there's historical  
12 information from aerial photography principally that can be overlaid over each other and you can  
13 come up with a set of lines of where a shoreline happen to be. And this is . . . (inaudible) . . .  
14 Various time periods going back to the early part of the 20<sup>th</sup> century. And so the way they come  
15 up with a historical rate is they overlay these lines on top of each other and then plot along  
16 transects. Each of these little vertical lines there's a transects, 20 meters away from each other.  
17 They plot the lines on a transect, for a transect. They see how far -- what they show to be and  
18 then they fit a graph here. So that's how it comes up with an average, average annual erosion  
19 hazard rate. You use a linear regression basically to come up with an average rate.

20  
21 So it's a very good representation of what the average historical erosion has been. But now  
22 they're coming up with science and different ways of moving beyond that. So this is what we  
23 have right now. You've probably heard other people say Maui County was the first in the state  
24 to adopt any kind of scientific based setbacks for erosion. But the science and the practices is  
25 moving on. This is 15 years old, and so we need to look at, relook at it for a few reasons. Even  
26 before the sea level rise report was being prepared, we realized five years ago within the  
27 Planning Department there were various problems with this and warranted refine or  
28 revision...on these, on all three of these factors.

29  
30 First off, we realized the 50 year multiplier was probably too low. For example, we -- American  
31 Society of Coastal Engineers was provided some guidance. But the average life expectancy is  
32 probably a little closer to 70 years. And it's actually a 70 year time frame has been adopted by  
33 the County of Kauai who has taken the same kind approach we did, but much more recently  
34 than we have. So again that warranted some change. 50 years to 70 was what we looked at.  
35 Erosion, historic erosion rates may adequately count for episodic events. That, that's -- that  
36 they don't. It's just a static line. It doesn't account for tsunamis, hurricanes, or even just  
37 smaller, smaller significant events. There's a minimum setback that's at the end of the formula  
38 that we thought was a bit small, but because it's in -- technically if a, if a shoreline retreats to  
39 where it's 20 feet from a structure, the structure is considered to be eminently threatened. And  
40 this buffer we have right now only give us really a five foot buffer between the shoreline and  
41 when something becomes eminently threatened. So it looked like that needed more work. I  
42 think the County of Kauai had something like 40 feet or maybe Jim or Keith could correct me.  
43 But again this number by the County of Kauai has changed also. Because again they have  
44 done it more --. 40 feet, Jim's telling me. They've looked at this more recently than we have.

45  
46 And the last item, No. 4, which you've just been hearing of, sea level rise is not a factor. So this  
47 is what we have right now, and we've been -- the Mayor's proclamation has directed, directed



1 us all to try to work to at least incorporate the sea level rise factor into it. So let's look at that.  
2 There's a couple of ways that we've identified that we could revise this setback. One is to take  
3 a different approach. Again, the science and the state-of-the, the state-of-the art practice,  
4 another alternative. I don't know if it's the way everyone's going, but another alternative, to  
5 using a historical rate is to be using something that I don't want to get too technical, but it's  
6 probabilistic, and that's a different, a little bit different approach that was used to come up  
7 with an erosion area within the shore level rise report. But I'll show you in a little bit how the, in  
8 the sea level rise report, they actually, there is a red line that is shown if you go into that viewer,  
9 you can find the red line that is where if they have suggested is, gives it -- there's an 80%  
10 chance they say that with a 3.2 feet of sea level rise that the area, the land makai of that line will  
11 erode within that timeframe. So it's a probabilistic; 80% chance of erosion with that time frame.  
12 And we could use that. We could adopt that as a...as an alternative to our current sea level  
13 rise approach. I'll just give you three shots from that same viewer that Dr. Fletcher just showed  
14 us, showing examples of where this shows, and whether this ends up showing in Lahaina along  
15 Front Street. And again you can replicate this yourself now, now that you know how to operate  
16 that viewer. And I'll give you two more just to show you what it will end up looking like. Here's  
17 one, Baldwin Beach, Paia. And then there's another example down in the Halama Street area  
18 of Kihei. So again, that would be a red line that would be this new basis for shoreline setback.  
19 That is one approach again.

20  
21 Option No. 2 we can still kind of go back to the concept we had five or six years ago of updating  
22 our current approach to shoreline setbacks by updating the setback formula. So let me give you  
23 a few examples of what that might end up looking like, or a little bit more about it. Again, I went  
24 through the formulas. It's 50 years times the average erosion hazard rate, plus 25 feet. And I  
25 also went through these other numbers in the refinement slide a little bit ago. So this was a  
26 proposal that the Planning staff came up with in --. We ultimately brought it to Council, made it  
27 public in 2016. Didn't bring it to the Commission yet but at least it became public as a proposal  
28 from the Planning Department. So, it's still probably the best, best way to take our existing  
29 formula and adopt modifications to it. The best way we have on the table right that we could, we  
30 could assess you, pursue if you would want to go this approach instead of the other one.

31  
32 So here's a few examples of how that would look. It's a, it's kind of a --. Now one of the  
33 disadvantages of using this approach is you really can't plot a line on a map to be exact and  
34 precise. You can't just go like you can to a zoning map and say I'm in zone -- you know, I'm in a  
35 business zone or I'm in a residential zone. With a formula approach you have to figure it out on  
36 a parcel by parcel basis and real time. You have to find out what --. You have to go and get  
37 established what the current shoreline is by a shoreline survey. That has to go to be certified by  
38 the Board of Land and Natural Resources. And then we have the basis from that to apply the  
39 formula to figure out the shoreline in a parcel by parcel basis. So that's one of the --. It's way --.  
40 It works, but it's kind of humbug because you can't see the whole, the whole shoreline -- you  
41 can't see the whole setback area in one picture. But in trying to look at how we would -- what  
42 would the implications of changing from our current setback formula to the proposal of, as I'm  
43 calling the 2016 proposal, we did have our geographical information staff try to estimate, do an  
44 approximation of where the lines would be based upon our best guesses of where the  
45 shorelines actually is. And so this green line shows our best estimate in the Front Street  
46 Lahaina area of where the setback would be with our existing setback formula and the red  
47 shows where how it would be end up moving, moving mauka under the 2016 proposal.

1  
2 I'll show you a few more examples. So this is also at the end of Baldwin Beach, Paia area.  
3 Again you see that the green is the existing, the red shows a little bit mauka movement. We  
4 don't have enough information, didn't have enough scientific information to map the Kihei area.  
5 But those are, again, those are two different approaches, and they're substantially different. I've  
6 been working with this for, for quite a while and I actually was on the committee that, sat on the  
7 committee that worked with the DLNR folks in drafting reports, so I'm very comfortable and  
8 familiar with all the work that just got presented to you.

9  
10 And I, I can't put this forth as department recommendation, and certainly it would be my  
11 recommendation that we're probably be better off to move forward with the, the newer  
12 information from the sea level rise report and there's a variety reasons why I would suggest that.  
13 Although, you know, we could use the current formula if people are more comfortable with it and  
14 would rather do that. As it turns out, Tara Owens who you heard mentioned, whose name  
15 mentioned a few times, has done analysis and you know looked at comparing the two of them,  
16 the implications of either of those approaches and, and found that they're really fairly, fairly  
17 close. So it's a matter of how we do it. But again we have the sea level rise report, you have  
18 something adopted by the state, everybody should be -- you know, everybody -- it's a common  
19 ground that all the counties are going to be working from. So among those is --. And it actually  
20 does put a line on the map. Those are at least few of the reasons why again I'd suggest we  
21 look more in that direction than just updating the shoreline. But again we would want to have  
22 your feedback on which way you'd like us to go, either at this meeting or a subsequent meeting,  
23 we bring it back to you, and then we can work out, we can work those into rules and bring it  
24 back to you so you can actually accomplish this request. So again that's one significant item  
25 that is within your kuleana.

26  
27 A little more --. But again you saw the layers. I'll show you. Next we're going to talk about  
28 future chronic coastal flooding and here's the layers again. Dr. Fletcher showed this slide a little  
29 bit ago. Again, what --. So all Maui County does right now, we deal with the coastal erosion.  
30 We deal with the coastal erosion segment of it. We haven't begun, we haven't addressed, and  
31 we don't even deal with the coastal erosion in terms of sea level rise. Don't feel bad. We're 15  
32 years ahead of everybody else. We're doing okay, but it's time to update things now. But any  
33 case the study that just got presented to you, not just looked at coastal erosion. But again, they  
34 looked at annual highway flooding. So where -- what would be the maximum mauka extent  
35 where flooding, they would expect flooding to occur at least once a year based upon sea level  
36 rise. And then they also looked at passive, passive flooding which is sometimes called the bath  
37 tub effect. That's where because of our poor soils we don't the clay layer as Sam was  
38 mentioning for the New Orleans area where you're basically as sea level rises you're going to  
39 have some wetlands developed. You're going to have areas mauka where you may have land  
40 between the ocean and the water, but they're low enough that you'll have new wetlands. So  
41 that's area of passive flooding. And that all lead to the entire sea level rise exposure area.

42  
43 Well since we, since our current structure and the erosion setbacks really only deal with that,  
44 they don't deal with these other two things, and this is happening when we've been directing to  
45 deal with this report. This is another area where I think the commission could certainly stand  
46 having some attention put. So next one is -- so there's, again, in this slate of six bullet head  
47 response options. Just very basic. There's a lot of ways that we can deal with, the County and

1 other places should be dealing with that, those annual high wash waves areas. But a couple  
2 again on that are to treat setbacks. We can tell people, okay, well this is an area where you're  
3 going to be flooded. You may not, it may not be land eroded, but it's going to be, we know it's  
4 going to be flooded on an annual basis. And so we can tell them, okay, maybe we can extend  
5 the setback a little bit further mauka. This is an erosion area, and we're going to say, don't build  
6 there. But the lot of the, a lot of areas that are already built so, hey, what can we do to assist  
7 with relocation again? Regulatory responses and you have purview in that arena. Adaptation  
8 areas where maybe you know maybe not everybody can move out of those area, but maybe  
9 you can adapt. Maybe you can, at the very least, you can look at having structures be elevated  
10 and, or within that area, no longer allow slab on grade construction. Make sure that all  
11 structures have actually, if there are new structures that go in there that they get elevated.  
12 When the roads are going in, being revised that they are elevated. Things like that need to be  
13 looked at. Again, you have some authority in that area.

14  
15 The flood hazard zones in the County of Maui are addressed in through code, and you make  
16 recommendations as Commissions to the, to the County Council. But that gets actually adopted  
17 by the zoning ordinance. You have role in this kind of area, but it will be a shared role.  
18 Whereas in the setback, that is your, that is your entire purview.

19  
20 So again a few examples here again from the sea level rise viewer. Now I talked about the red  
21 line. This is in the Lahaina area shows this, the erosion line from the report, and it shows areas  
22 of the flooding. Well, this is a little --. Sometimes you'll see, for example, this area, and a couple  
23 areas out on the south, south of the banyan tree park, etcetera. Moku'ula, is that right, if I  
24 remember right. This area is shown as to be receiving an area of chronic coastal flooding as  
25 early as 2060. And then there's a few other areas, another area just to the south where you see  
26 that the coastal flooding area extends again via mauka of where the erosion is. So we've got to  
27 be thinking about the areas and addressing them. Baldwin Beach, Paia, you see it's even more  
28 severe. Those blues lines go, a lot of them go way mauka of the erosion hazard area. So stuff  
29 that and we, as a community can't afford to ignore or maybe we can in the next year or few  
30 years or whatever. But if we're concerned about our children's children, and their children, and  
31 we want to be responsible to future generations, we need to be addressing these things sooner  
32 than later.

33  
34 And this is just to show you an example in one particular area a combination of these things.  
35 Again, the Front Street, the erosion line from the report, this is what it looks like if we were to be  
36 using the 2016 proposal of the setback modifications and then again showing how, how there's  
37 an overlap of the passive flooding areas.

38  
39 So now there are other adaptations the Planning Department is doing that you have, that you  
40 see in a permitting standpoint as Jim went through. I'll just kind of briefly go through a few of  
41 those and remind you of them. And after indicating that at least --. You know, so we're going to  
42 talk about one approach that the Planning Department is pursuing, you know, Jim, Keith and  
43 Tara, particularly, on a daily basis. Jim even had to be fielding calls over the weekend. I mean,  
44 it's like, it never stops. It really doesn't. Our office is always . . . (inaudible) . . . But one of the  
45 things I can try to do in terms, in addition to respond to emergencies is work on beach re-  
46 nourishment or dune restoration, so I'll show a few examples of that. The Paia and Youth and  
47 Cultural Center in the Paia showing --. These were examples that Tara Owens put together

1 showing areas of restoration both before and after up in that area. Paia Park shows 2016, and  
2 Jim would have, would probably a lot more information of these slides than I do, but I'm going to  
3 kind of run through them quickly in the interest of time.

4  
5 You probably heard about Stable Road a little from people who passed showing what things  
6 looked like in 2016 and 2000 -- I mean, from 2006 and 2009. The owners along that bay got  
7 together, they hui'ed up, they pursued a small beach nourishment project and this is what it  
8 looks today. It looks like today. It can be successful. Their properties have by far surpassed  
9 and increased in value over the cost of actually curing out the nourishment. So it's a very viable  
10 strategy. It's not something the planning commission does directly, but you're certainly in a  
11 permitting stand point for that. And you've, many of you sat and heard things about Kahana  
12 Bay. Just a reminder, it's a major project the Planning Department is pursuing on that, just  
13 showing of the various condos that are involved in that. That includes over existing condos that  
14 were built too close to the ocean and now threatened by erosion. There was formally wide  
15 beach, it's been, that is, you've seen slides of how it's going away. Erosion rate, historical  
16 erosion rate of 0.17 per year. Narrow beaches are . . . (inaudible) . . . contributing to erosion.  
17 And there's an episodic erosion that has even more worse, even worse as you have seen from  
18 a few of the last winters. Some restoration mentioned . . . (inaudible) . . . restoration concepts.  
19 So, again, these are responses that the Planning, that the County can be pursuing.

20  
21 Community planning; I only have one slide on that. But the West Maui Community Plan is now  
22 underway. Actually the Long Range Division of the Planning Department lead the way in terms  
23 of drafting the proclamation that the Mayor signed, so they're involved in that. They're going to  
24 be incorporating sea level rise into it. And this is the, this is the venue in which all of the smart  
25 growth kind of principles that Sam Lemmo was talking about the end to get established. It's  
26 also where, the venue, in which we talk in a bigger picture what is the community going to do  
27 about to manage retreat. There might be a building or two that can be build. When you have a  
28 whole area, a larger area that's going to be affected, it's a community wide issue. So it's a  
29 community plan kind of policy. Are there going to be places in the community plan to be  
30 receiving businesses and, I don't know, homeowners that need to be moving out of the area for  
31 the manage retreat. So community plans are critical location for addressing how the planning  
32 department and you as commissioners will have a significant role in how to be addressing  
33 impacts of sea level rise.

34  
35 So I wanted to thank you again for this meeting and listening to us. And if you have any  
36 questions, and again, I'm particularly since we have certain direction within the proclamation to  
37 be addressing the shoreline setbacks to incorporate sea level rise either now or if you would  
38 prefer at a future a meeting. I'd be very happy to come back and talk about that more so we  
39 can get more direction from you on at least of which of those options I mentioned you'd like us  
40 to pursue so we can begin to write some rules and get something that you can, that you can  
41 adopt.

42  
43 So again, at this point of the agenda, you haven't had any opportunity for public testimony so I  
44 suggest this might be a place to do it. And then we can do some final Q&A, wrap up, and get  
45 everybody home. Thank you.

1 Ms. Duvauchelle: Thank you. Thank you Jeff. Okay, at this time we will open the floor for public  
2 testimony on this item. Anybody wishing to testify please come forward. Okay, seeing none,  
3 we'll close public testimony and we'll take questions or discussion from the Commissioners.  
4 Commissioner Carnicelli.

5  
6 Mr. Carnicelli: Thank you Chair. So my question is if we're going to start talking about the  
7 setback rules, and we're going to use the SLRXA report, you know. And so my concern is that  
8 we just end up with a digitized version of the dead seas scrolls because we have line on a map  
9 that is going to take interpretation, right. So it's like if I have a --. I mean, you showed like, you  
10 know, a map in Lahaina, let's just say. So let's say I own, you know, a property, a vacant lot in  
11 Lahaina, and I want to go ahead and get, you know, a permit. And it's going to say, okay, we'll  
12 we got to go by that line, and we're going to look at that map, and we're going to say the line is  
13 here, where is the -- you know, where are we going to know, okay, it's actually 27 feet from the  
14 property line? You know, the thing is --. Is it seems like this is a different version of the dead  
15 seas scroll, just digitized.

16  
17 Mr. Dack: I don't see that there will be that much room for confusion. I believe it is a digitized  
18 line of . . . (inaudible) . . . small width. Yeah, that's the way it's going to be. It will be --. It will  
19 be precise. It will be a precise line.

20  
21 Mr. Carnicelli: I'll be able to see. I'll be able to go to that map and it will say, okay, it's 27 feet  
22 from my property line, and then that's where I'm going to, you know, then have my setback?

23  
24 Mr. Dack: Well, if for example, you're working on the sea level viewer right now, it wouldn't show  
25 your property line. But there are --. As you saw Dr. Fletcher was able to over lie those layers  
26 over digital imagery. So you could, you could drill down in that viewer now to very, very small  
27 scale, and see where that line may fit in relationship to where you could identify a house from  
28 the digital imagery. I believe it's going to be --. I haven't drilled it down that far, but I believe it is  
29 that precise and I don't think there will be much difficulty with interpretation.

30  
31 Mr. Carnicelli: Okay. I mean it's just my concern is all.

32  
33 Mr. Dack: That's a perfect concern. Well, we need to verify, but that's my understanding it will  
34 be very precise.

35  
36 Ms. Duvauchelle: Director.

37  
38 Mr. Spence: It sounds like we're mixing a couple of things. One is a viewer which, you know, I  
39 have no reason to believe, you know, doubt its accuracy. But what Commissioner Carnicelli is  
40 asking about is if he wanted to get building permits, and he wants to know where his shoreline  
41 setback is, we still have to go through the process of getting a certified shoreline with DLNR and  
42 involve a surveyor and all of that stuff. That's going to establish and apply depending on what  
43 this Commission does with the setback rules, apply whatever applicable formula is for that lot.

44  
45 Mr. Dack: Not necessarily, no. They're actually --. The two options represented at mutually  
46 exclusive. If we continued with the modification, modification of the current scheme of using an  
47 erosion based setback, then, yes, there would still be some need for certified shoreline survey.

1 The option no. 1 which would rely upon on the sea level rise report and the specificity from the  
2 shoreline viewer, we'll do away with all that. You would actually have a precise line that  
3 wouldn't require any certified shoreline surveys to be involved.

4  
5 Ms. Duvauchelle: Commissioner Kahu Hill.

6  
7 Kahu Hill: Aloha Chair. I wanted to understand something. Since 2008, so it's been a decade  
8 I've have the DLNR on my additional insured to hold permits on the beach, beaches around.  
9 And it's for all of the islands, but I come to know Maui more importantly. And it's always been  
10 measured the beaches up to the high vegetation mark for State. And then it went to County or  
11 then individual property. I'm wondering how that will affect the future on how you're going to  
12 measure the State beaches or where it becomes County land. Is that going to play into this sea  
13 level rising on where it's State land and County land?

14  
15 Mr. Dack: I understand that the, the boundary of jurisdiction between the State and the County  
16 is a moving line. And it moves with the, for example, the high reach wash of the wave has been  
17 the typical demarcation of the, of the boundary line. And as sea level rises, the high reach of  
18 the wash of the waves will be also higher. So, yes, I would expect that, you know, the line, that  
19 boundary between the State and County jurisdiction will change as the sea level rises. I haven't  
20 heard of DLNR or anyone talking about a different of way of measuring that demarcation.  
21 That's my understanding of what it can basically is in most cases. Obviously you don't have a  
22 high reach of wash of waves when you have rock out properties. But I think, I haven't heard of  
23 anyone thinking about any changes to that fundamental approach of determine jurisdiction.

24  
25 Ms. Duvauchelle: Commissioner Robinson.

26  
27 Mr. Robinson: I'd like to get clarification and it can be from any three of you. Did I hear that this  
28 Commission is going to decide what the setback is going to be?

29  
30 Mr. Dack: That is your purview. Yes.

31  
32 Mr. Robinson: And the recommendation is now 70 years, so we're talking about remodels. Will  
33 that fall in our jurisdiction, if somebody's going to remodel any part of their house if that's in the  
34 SMA?

35  
36 Mr. Dack: Well your shoreline rules are pretty comprehensive right now, and they don't just of  
37 course address the setback. But they also address what you can do or not do within a setback.  
38 And right now your shoreline rules allow remodeling to occur within a setback. And so you --. If  
39 all you were to do is to change lines and the other aspects of your rules stayed the same, then  
40 yeah, you could still do a remodel. But, you see, that's again, that's up to your purview also as  
41 a Commission.

42  
43 Mr. Robinson: But that's also up to our purview if a remodel would be considered a new  
44 construction because we're looking at 70 years?

45  
46 Mr. Dack: You could, you could change your rules to, to do that, to make a remodel, to look at  
47 new construction. Right now, it's a remodel. Then we get in to some, we get in to some fine

1 detail of where and how you draw the line, but, between a remodel and new construction. But  
2 basically if you're within --

3

4 Mr. Robinson: Well, each hotel remodels, and they remodel constantly.

5

6 Mr. Dack: Yeah.

7

8 Mr. Robinson: Is what I'm saying.

9

10 Mr. Dack: Yeah, generally within, within the existing skin of the building sort of speak, if there's  
11 changes that occur inside the building, or occur to the surface of the building, we look at that as  
12 a remodeling and not reconstruction. If you're adding floor area, if you're adding height, then we  
13 look at, then they're kind of grandfathering so to speak is effected, and they may need to come  
14 in for, more significant consideration. Actually remodeling right now is something that your rules  
15 has actually delegated the authority for the Planning Director to approve, so you don't even see  
16 remodels right now.

17

18 Mr. Robinson: Right now.

19

20 Mr. Dack: Right now. But the Commission can change those rules if you wish. You know, but  
21 all we're suggesting -- we're not suggesting any modifications to those, those use kind of things  
22 considerations in the rules right. We're just talking really just about the shoreline setbacks and  
23 how those could be updated.

24

25 Ms. Duvauchelle: Thank you.

26

27 Mr. Buika: Jim Buika. I could just make a comment that, you know, if we go up to Lahaina side,  
28 Front Street, the low number is 100, 200, 300, 400 block up Front Street, some of those lots are  
29 maybe 99, 100 feet deep. Without coming to you they can build a, believe it or not, a 7,500  
30 square foot house with --. For a lot --. Okay, minimum setback, if there is no erosion, it's 25  
31 feet. So we could actually build like a \$2 or \$3 million dollar large, large house, 25 feet from the  
32 ocean. My point being is that without moving our setback farther back what we're doing is we  
33 are building more and more, or we're allowing more and more at risk structures where people  
34 have expectations, right, of protecting their property. So if it's only 25 feet back, we have  
35 erosion. They put \$2 or \$3 million into a house. What is their expectation? That they can  
36 protect it by putting a seawall, right. We're not going to move that. It's probably taking up most  
37 of the lot. So I mean that's an extreme example. Obviously the larger setback where we do  
38 have erosion it's going to minimize our development at risk. Rather than adding development at  
39 risk, we want to minimize development at risk.

40

41 Mr. Robinson: Okay Jim, but wouldn't they have to come to us for an SMA? They can't just  
42 build it because it's the setback. It's still in the SMA area.

43

44 Mr. Buika: Not if it's the single-family home. We, we --

45

46 Mr. Robinson: So a single-family home doesn't have to.

47

1 Mr. Buika: Unless it's 7,500 square feet. Right now they are as Sam Lemmo did state they are  
2 trying to lower that threshold for some single-family homes that come to the Commission.

3  
4 Mr. Robinson: But isn't a trigger also half a million dollars?

5  
6 Mr. Buika: No, not residential single-family homes. Can you imagine if you guys were --? I  
7 mean you guys are inundated with --. You guys know what you're inundated now. If we added  
8 single-family homes, if it wasn't an exempted under the SMA Rules then we would be bringing  
9 many, many single-family homes to you. But if it is large, right, if it is over 7,500 square feet in  
10 floor area, then we do bring those to you. There have been a couple of homes that have come  
11 to you that are 8,000, 8,500, 9,000. So, it's a high threshold and so we don't see many.

12  
13 Mr. Robinson: So, so with the, with the setback we can control the setback that would then  
14 affect the residential? Is that what I'm hearing?

15  
16 Mr. Buika: Yes. That's -- yes. We have --

17  
18 Mr. Robinson: So it's exempted from us hearing an SMA, but if we change the coastal  
19 management setback, then they'll just abide by that even though it's not coming here?

20  
21 Mr. Buika: Yes. So, they would have to build further back. There would be a larger setback  
22 under that rule, you know, 70, the 70 plus adding sea level rise and a, yeah, a 40 foot minimum  
23 setback.

24  
25 Mr. Spence: Well, what Jim's talking about right now was single-family residences the, that's  
26 set in State's statutes. That 7,500 square foot house requires a permit so that's why you see  
27 occasionally those right now because it's different from --. But that's anywhere in the SMA.  
28 That's not necessarily on the shoreline. So there is some discussion of removing the shoreline  
29 area and properties abutting like a state beach reserve, no matter what the size of a house  
30 there's, Sam Lemmo touched on a proposed law that would make it, that would require a permit  
31 for any house over 2,000 square feet. That's one --. 2,000 square feet could be roughly  
32 affordable, but you should know that in some places our SMA is over a mile wide and it has no  
33 relation to the shoreline would make things extraordinarily difficult for a small land owner. We're  
34 supporting --. We submitted testimony for that to say, okay, anything on the shoreline needs a  
35 permit. But past that, you know, that's, that's really depending on the exact circumstance.

36  
37 Ms. Duvauchelle: Commissioner Carnicelli.

38  
39 Mr. Carnicelli: So I'm going to just revisit here the, what you're sort of asking for us which is, or  
40 asking from us, is, you know, the direction as far as what we think maybe we should do with this  
41 setback. So as I look at it now, I mean, we've got, it's, it's 25 years. I mean, it's 25 years plus  
42 the erosion rate, and then 25 feet on top of that. But the erosion rate, I mean, that's a static  
43 study. Actually go back one because I got to other overlay thing. Anyways, but yeah, okay  
44 there's the formula. So it's 50 years, plus the erosion rate, plus 25 feet, and so you're saying,  
45 okay, so we could just change it to be 40 feet and 70 years, you know, plus, plus. But if you go  
46 to your option one was the report line say plus 40 feet. My first question is, the line, is that



1 going to be, is that the line that includes highway flooding and erosion, or does that just  
2 erosion?

3  
4 Mr. Dack: This is, the white line, is just the erosion itself.

5  
6 Mr. Carnicelli: Just erosion. So if we chose we could say, hey, listen we want to take all three.  
7 If what we really trying to do is say we don't want to be build anything that's going to be in  
8 danger, we can say okay let's go to that line instead of this line?

9  
10 Mr. Dack: The Commission could do that.

11  
12 Mr. Carnicelli: Okay.

13  
14 Mr. Dack: Within the --. Yeah, I believe the Commission can do that.

15  
16 Mr. Carnicelli: Sure, I mean we're here to make the rules.

17  
18 Mr. Dack: It's a setback. Yes, it's a setback.

19  
20 Mr. Carnicelli: Right.

21  
22 Mr. Dack: It would be a setback.

23  
24 Mr. Carnicelli: Is there a reason why you're not going to that line and you're going just to the  
25 erosion line? I mean, as you're presenting this.

26  
27 Mr. Dack: Yes. The --. It, it -- it mainly comes from where we are right now and what we felt we  
28 needed to do. We have a, we have a, and as I've said in place the 15 years, an erosion rate  
29 setback. We have been directed to at least look at updating that to incorporate sea level rise.  
30 So we haven't --. The Mayor's proclamation also did direct the County to be looking at the  
31 whole report and implementing the report. So in a broad sense, yeah, it certainly would be  
32 reasonable to be going beyond that red line. But we've known for a number of years we had to  
33 deal with this, the erosion setback. That's been on the table. That's a regulatory tool that's  
34 already, you know, that's in your rules right now. So we certainly wanted to address that at the  
35 very least. And it is also may be fair to address the other blue areas in different ways. Certainly  
36 if you have an area that's going to be eroded you absolutely do not want to have -- you don't  
37 want to build anything there really at all. Whereas conceivably if you're in a passive flooding  
38 area or you're actually in an area where you have an annual high chance of an annual erosion,  
39 and maybe you're in the upper end of that, well, maybe you might want to allow actually some  
40 development in there with elevated. You know, you have a somewhat different approach. But  
41 the most conservative and I guess you could say aggressive way to look at that, even that  
42 flooding area, would be to say don't build there too. And the Commission, you know, that's  
43 something the County could do. But if it gets a much larger area, in some places, it's a much a  
44 much larger area than an erosion area so it's, it's --. And it's new grounds, new territory that the  
45 County hasn't really dealt with. Whereas we have the history of dealing with the strict erosion  
46 area. We don't have a history of dealing the flooding area beyond the FEMA maps and flood

1 zones. So it certainly felt it was worthy of a lot more consideration by, by the County of how to  
2 deal with that flooding area beyond the erosion. They're somewhat different animals.

3  
4 Ms. Duvauchelle: Commissioner Carnicelli.

5  
6 Mr. Carnicelli: Okay, so I don't want to make this too complicated or get too terribly deep, but  
7 you know we talked about going up. So there is the dynamic that is the red line which is what  
8 we're talking about, which is, you know, erosion. And then we also got flooding. So maybe  
9 what the setback is, is based on the erosion rate. But then if you're in the flood as well, then  
10 you've also got to go up, you know. And that's part of the setback rules that we decide that we  
11 wanted to do. You know, so it's like okay you can built to this point, but you know, if you're in  
12 that middle thing, then you got to go up.

13  
14 Mr. Dack: Yeah, that's a very reasonable way to look at it. I agree.

15  
16 Mr. Carnicelli: Right. I mean, then it's just a matter of, you know, how do we calculate these  
17 formulas. Because the erosion rate, I've always felt it was a little bit, and I'm not going to say  
18 hoaxy, but it's just like it was a snap shot in time. And if like that report was done in 2016 which  
19 is like 80% of your slides from 2016 when everything was just eroding, you know, the erosion  
20 rates would have been much greater if we would have done that study in 2016. So that where,  
21 you know, I like going from the report personally. I mean, obviously this is going to be a  
22 decision that the entire Commission makes but I'm giving you my two cents which is, you know,  
23 I think that it makes more sense to go from the report than saying okay let's get a certified  
24 shoreline and then go with erosion rates. So that's just my two cents.

25  
26 Ms. Duvauchelle: All right, are we good? Thank you both of you very much, Keith, also, for your  
27 time and your presentation. We really appreciate it. Thank you very much.

28  
29 Mr. Dack: And then I hope I'll be able to come back again reasonably soon to discuss this  
30 further as far as clear direction beyond what you had opinions from one Commissioner.

31  
32 Ms. Duvauchelle: Thank you. Thank you very much. All right Director, our next agenda item.

33  
34  
35 **F. DIRECTOR'S REPORT**

36  
37 **1. SMA Minor Permit Report**

38  
39 **2. SMA Exemptions Report**

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41 Mr. Spence: Commissioners, we're on Item F of your agenda, the SMA Minor and the SMA  
42 Exemption reports. And unless you just have questions on any particular item, we're just  
43 looking for an acknowledgement that you received it.

44  
45 Ms. Duvauchelle: Everybody in favor raise your right hand, or left.

46  
47 Mr. Spence: That's unanimous. Thank you.

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**3. Discussion of Future Maui Planning Commission Agendas**

**a. April 10, 2018 agenda items**

Mr. Spence: Discussion of future Maui Commission agendas.

Ms. Duvauchelle: It will be without me. Now you know if I show up in the audience it's I'm really being strange right?

Mr. Carnicelli: You have to testify.

Mr. Spence: So April 10<sup>th</sup> we have a number of things going on. First off is the introduction of new member, Denise La Costa.

Mr. Carnicelli: P. D.

Mr. Spence: Sorry?

Mr. Carnicelli: She goes by the pretentious P in front. So it's P. Denise La Costa.

Mr. Spence: P. Denise La Costa. Okay. Then there's going to be election of officers for the 2018-2019 board year. As well as the Chair and the Vice-Chair, there will be an orientation workshop that we'll, we'll go over the Planning framework, and the basis of Zoning, and those kinds of things. And then Item D which will begin at one o'clock, after lunch, we're going to hear a remanded --. Well, Paia Inn is getting remanded from Circuit Court back to this -- it's a stipulated remand -- back to the Planning Commission and for the appointment of a hearings officer to deal with the matter. So, and we'll probably go into Executive Session at that particular meeting so we'll talk about it then.

**G. NEXT REGULAR MEETING DATE: APRIL 10, 2018**

**H. ADJOURNMENT**

Ms. Duvauchelle: Okay. All right, we're all good. Commissioner Robinson?

Mr. Robinson: Chair, I would like to thank you for serving with us for the last three years. Your partnership, your guidance, your knowledge, it's been really appreciated. Thank you.

Ms. Duvauchelle: Thank you. Commissioner Kahu Hill.

Kahu Hill: Mahalo . . . (spoke in Hawaiian). . . I just want to say blessings to you. I haven't been here for very long, but having your presence here and you as woman as well has been so strong, so blessings to you in your future.

1  
2 Ms. Duvauchelle: Thank you. Commissioner Carnicelli.

3  
4 Mr. Carnicelli: Yeah, I also just want to say thank you. You've said on several occasions you  
5 didn't talk for the first two years. I got here three years ago, so it was like I got to watch you talk.  
6 But, you know, I mean just to see you step into being Chair, we elected you without you being  
7 here.

8  
9 Ms. Duvauchelle: I started to say.

10  
11 Mr. Carnicelli: You were the one person who was not here, so we said we're going to make you  
12 Chair, and you did a fantastic job and I really appreciate your leadership and everything you  
13 bring to the Commission, so thank you again.

14  
15 Ms. Duvauchelle: Yeah, thank you.

16  
17 Mr. Tackett: Sandy, I also want to say thank you so much. And because you were absent it was  
18 unanimous. So it's been a pleasure. Thank you so much.

19  
20 Ms. Duvauchelle: Thank you. And all of you, you know, you've got a tough few years ahead of  
21 you. Don't expect it to get any easier, but continue to be kind and respectful and appreciate  
22 your Planning Department because they have been awesome all the way around. And our  
23 Corporation Counsel. So thank you very much. Akaku gentlemen, thank you. Carolyn, you're  
24 wonderful. Keith, guys, I thank you so much. All right, the Planning Commission is now  
25 adjourned.

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27  
28 The meeting was adjourned at approximately 3:56 p.m.

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31 Respectfully submitted by,

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35 LEILANI A. RAMORAN-QUEMADO  
36 Secretary to Boards & Commissions II

37  
38 **RECORD OF ATTENDANCE**

39  
40 **Present**  
41 Lawrence Carnicelli  
42 Steven Castro  
43 Sandy Duvauchelle, Chairperson  
44 Kahu Alalani Hill  
45 Richard Higashi, Vice Chairperson  
46 Keaka Robinson  
47 Christian Tackett

1

2 **Excused**

3 Tina Gomes

4 Larry Hudson

5

6 **Others**

7 William Spence, Director, Planning Department

8 David Galazin, Deputy Corporation Counsel, Department of the Corporation Counsel

9 Rowena Dagdag-Andaya, Deputy Director, Department of Public Works

10