

BOARD OF WATER SUPPLY
COUNTY OF MAUI

REGULAR MEETING
THURSDAY, MAY 27, 2010

Held at the Department of Liquor Control
Conference Room, David Trask Building, Room 105,
Wailuku, Maui, Hawaii, commencing at 09:06 a.m.

Transcribed from the audio recording by Gaye
Hayashida, Commission Support Clerk, Department
of Water Supply, County of Maui.

1 A P P E A R A N C E S

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3 BOARD MEMBERS:

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5 Michael Howden, Chair

6 Phyllis Robinson, Vice Chair

7 Kevin Boteilho

8 Donald Gerbig

9 Kui Lester

10 Kelli Myers

11 Ted Yamamura

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14 STAFF PRESENT:

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16 Jeffrey K. Eng, Director of Water Supply

17 Edward Kushi, Jr., Deputy Corporation

18 Counsel

19 Ellen Kraftsow, Water Resources &

20 Planning Program Manager

21 Gaye Hayashida, Commission Support Clerk

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1 OTHERS:

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3 Robert L. Horcajo

4 Isaac Hall, Attorney for Michael Perry

5 Madelyn D'Enbeau, Deputy Corporation

6 Counsel

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1 CHAIR HOWDEN: Ok, I'd like to call the
2 meeting to order and acknowledge the board
3 members. Our new member, Kevin Boteilho;
4 Kelli Myers; Don Gerbig, back from China;
5 Ted Yamamura; Vice Chair Phyllis Robinson;
6 Director Jeff Eng; our corporation counsel,
7 Deputy Corporation Counsel, Ed Kushi; Gaye
8 Hayashida; and Ellen Kraftsow, Water
9 Resources. The director of Water Resources
10 or something like that, ok. Ha ha ha. Ok,
11 any announcements? Nope. Ok, might we have
12 a motion on the minutes? Are there any
13 corrections or deletions? The crucial part
14 of our meeting. Ok. Might we have a motion
15 to approve the minutes please.

16 MEMBER MYERS: I move.

17 MEMBER YAMAMURA: Both minutes?

18 CHAIR HOWDEN: Our, our minutes from last
19 month?

20 MEMBER MYERS: I move.

21 CHAIR HOWDEN: Ok. Is there a second?

22 VICE CHAIR ROBINSON: Second.

23 CHAIR HOWDEN: Ok. Do you need to review,
24 Ted?

1 MEMBER YAMAMURA: Ah no, I was just
2 questioning whether we're approving both the
3 April 22nd and the continued April 28th
4 minutes.

5 CHAIR HOWDEN: Oh no, we have to do those
6 separately. Right? One at a time? Oh
7 well, let's do them together.

8 MEMBER GERBIG: Yeah, 'cause your 28th is
9 reconvened so it's all one.

10 CHAIR HOWDEN: Yeah, minutes are minutes.

11 MS. HAYASHIDA: So the motion to approve
12 would be for approval of both...

13 CHAIR HOWDEN: Yes.

14 MS. HAYASHIDA: Minutes.

15 CHAIR HOWDEN: Ok, those in favor? Aye.
16 (a chorus of ayes)

17 CHAIR HOWDEN: Testimony from the public;
18 we have Robert Horcajo.

19 MR. HORCAJO: Sit down here?

20 CHAIR HOWDEN: Oh please. That's so we can
21 see you and hear you.

22 MR. HORCAJO: Better than standing.

23 CHAIR HOWDEN: You're welcome to stand.

24 MR. HORCAJO: Good morning Chairman Howden

1 and members of the Board of Water Supply.
2 My name is Robert Horcajo. I did submit a
3 written copy of my testimony. I guess I'm
4 here mainly to ask that in immediate future,
5 near future that this board have a
6 discussion on how to improve the appeals
7 processing in terms of time, or any other
8 mechanism for the general public to get some
9 relief from department's rules and
10 standards. In, in my situation I've been
11 processing a subdivision for, I'm not even
12 sure now, for 5+ years now. A couple months
13 ago, in talking with staff they basically
14 told me that if I decided to file a notice
15 of appeal, I probably would not be heard
16 'til next year. I officially submitted my
17 notice of appeal the first week in April and
18 I was told then that possibly I would be
19 able to present my case before the board in
20 November of this year but there were no
21 guarantees. As well, I think, I guess I
22 think I was told back then there were 8
23 appeals officially and 3 were on hold. I've
24 been scouring the agendas I guess from this

1 body for the past probably couple years just
2 to keep track of how many times somebody's
3 appeal came to the board and undoubtedly it
4 was kinda scattered. I, I, I guess for me
5 the mere fact that every situation seems to
6 be taken or, or y'know as a contested case
7 kinda bothers me. I've been to the Board of
8 Water Supply years and years ago and a lot
9 of the cases were handled just like a
10 variance, just like through the BVA.
11 Y'know, y'know, so I look at some of the
12 situations, possibly may not really rise to
13 the level of a contested case; that's what
14 this board should really look at that. I
15 also know that the rules do allow the board
16 to appoint a, a hearings officer. And I
17 guess from my standpoint if that expedites
18 the process for the general public to get
19 their day in court I hope you folks will
20 look at that too. I would imagine funding
21 is an issue, however, I can help as a
22 citizen to, y'know if that's an issue, again
23 please let me know. I guess lastly, I feel
24 that having talk with Jeff, I guess, for

1 months now, off and on, that there's gotta
2 be some form of discretion by an
3 administrator, whether it be water, parks,
4 mayor, it really doesn't matter, y'know,
5 there's gotta be some form. So, and I sense
6 y'know, there's really not a lot of
7 discretion; there seems to be that the
8 perception is life is black and white and
9 that's the way we have to deal with stuff.
10 But I hope that's not the case. I'm sure
11 that's not the case at your home. So, so, I
12 guess I'm saying if you have whatever tools
13 and direction that makes sense to give the
14 director to give him some discretion to
15 administer the rules and the standards in a
16 just and fair application that is what I
17 wanna see.

18 (beeping 3-minute timer)

19 MR. HORCAJO: I do understand that you
20 folks are volunteering your time. I've been
21 on the county board; I'm on a current county
22 board and we have extra meetings if we need
23 to. The Planning Commission as y'know have
24 gone through a lot of stuff; they have a lot

1 of special meetings. Again, I realize
2 you're volunteering you time but that's,
3 that's basically what you're here for and
4 that's what I've done on other boards. All
5 I'm asking for is my day in court in a
6 timely manner. It just seems not fair that
7 I'm being told it's 9 months, 12 months; any
8 delays especially in our economic times
9 really affects families' lives. So, y'know
10 I hope that if you're in my position you
11 would be angry, upset so however you can
12 talk about improving the process for relief
13 from rules and standards I would appreciate
14 it. Thank you very much.

15 VICE CHAIR ROBINSON: Thank you.

16 CHAIR HOWDEN: Board members, any
17 questions?

18 MEMBER YAMAMURA: So Bob, you're, you're
19 asking essentially for a ruling one way or
20 the other?

21 MR. HORCAJO: That's all I want.

22 MEMBER YAMAMURA: And if it's contrary to
23 what you're hoping for would you then,
24 what's the word I'm looking for, relinquish

1 your right to an appeal or, or to face the
2 board and ask for..

3 MR. HORCAJO: I'm willing to do that.

4 Y'know, I mean, I've, I mean, I've laid out
5 in my letter to the department what I
6 thought my options were. Again, we're not
7 here to kinda discuss my, my case and so,
8 y'know, I know what my options are; I just
9 want to get a decision. Sooner than later.

10 CHAIR HOWDEN: Ed, Ed, any comments on
11 this?

12 MR. KUSHI: Not now.

13 CHAIR HOWDEN: Ok.

14 VICE CHAIR ROBINSON: I have a question.
15 How, who makes the decision to, for this
16 schedule of appeals? Whose job is that to
17 make sure it gets and do, do I, I'm not
18 aware of necessarily of being consulted
19 about that so, so is it really our board's
20 power to decide when an appeal should happen
21 on the agenda?

22 MS. HAYASHIDA: Normally, I schedule an
23 appeal every month but I do keep one month
24 free in between basically for the department

1 or whatever to catch up on other matters
2 like the board to catch up on the Water Use
3 and Development Plan which probably would
4 take up a lot of your time. So, and then
5 also for postponement; y'know attorneys do
6 request postponements so that's an extra
7 month to slide them in y'know, but so far
8 that hasn't happened. With the 3 previous
9 appeals, they keep wanting to postpone so
10 I've put them on the bottom of the list.

11 VICE CHAIR ROBINSON: So, when there is a
12 postponement is there not enough time to
13 move people up?

14 MS. HAYASHIDA: Well, yes, because I am
15 mandated that I have to notify our
16 department of Corporation Counsel 60 days
17 prior to the meeting.

18 VICE CHAIR ROBINSON: I see.

19 MS. HAYASHIDA: So, a lot of times the
20 attorneys at the last minute make requests
21 to postpone and I don't have enough time to
22 notify our corp counsel to y'know, and we do
23 need them to, that much time to look at the
24 cases.

1 VICE CHAIR ROBINSON: Right.

2 MS. HAYASHIDA: Y'know and so, yes it's
3 unfortunate that we are running into next
4 year but I don't see any way out of it. And
5 I do try to schedule cases every month but
6 things happen like the last few months of
7 this year we had no appeals because the
8 previous cases are waiting for either their
9 appellant to get here or there's something
10 to happen y'know, so we do the best we can.

11 VICE CHAIR ROBINSON: So do you, since
12 you're the one that actually has the, do you
13 have any recommendations to address this
14 that would help maybe with the expedition
15 of, of this?

16 MS. HAYASHIDA: We did put a notice in the
17 Maui News for hearings officers and that has
18 close, have a closing date of May 14th I
19 believe.

20 VICE CHAIR ROBINSON: Ok.

21 MS. HAYASHIDA: And so we do have some
22 people showing, sending in their letters of
23 interest and their qualifications.

24 VICE CHAIR ROBINSON: Thank you.

1 MS. HAYASHIDA: But that will not, probably
2 not take affect until July 1st of this fiscal
3 year but then of course now we're facing
4 budget constraints so I don't know how much
5 money we will have to pay for that.

6 VICE CHAIR ROBINSON: And how will that
7 hearings officer help this process?

8 MS. HAYASHIDA: Because it would be
9 separate from the board. Then they come
10 with their recommendations to the board.

11 VICE CHAIR ROBINSON: Thank you.

12 MEMBER YAMAMURA: Gaye, on appeals that are
13 continued for whatever reason, is there a
14 way perhaps to move somebody else into that
15 time slot, the next meeting?

16 MS. HAYASHIDA: It's difficult because I
17 would need to notify our corporation counsel
18 60 days prior to that date, so that they can
19 prepare.

20 MEMBER YAMAMURA: So that's pretty much the
21 impediment right now, yeah, the notification
22 period.

23 MS. HAYASHIDA: Yeah. It wouldn't be fair
24 to our corporation counsel to give them any

1 less time.

2 CHAIR HOWDEN: Bob?

3 MR. HORCAJO: Yeah, I can speak? Thank you
4 for the questions and comments. So I guess
5 my question then is how many litigators is
6 there is at the county? Is it always the
7 same person and if it's not what's wrong
8 with scheduling 2 appeals or 3 appeals
9 during a meeting such that if somebody
10 postpones for some reason there is at least
11 another case that can be heard, 'cause I
12 don't believe you folks used the same county
13 attorney for each, each appeal again, I may
14 be wrong in concert and that was that.
15 Y'know but that's an option, I mean that's a
16 way to get through the appeals as fast as
17 possible.

18 CHAIR HOWDEN: Ed?

19 MR. KUSHI: I think there's about 2 or 3
20 attorneys assigned to the Board of Water
21 Supply for appeals. And last I heard they,
22 all, all of the attorneys are,
23 administrative attorneys assigned to
24 administrative appeals are swamped. So,

1 y'know again, whatever can be done hopefully
2 can be done but again it's, sometime it's
3 not, it's not the department's request to
4 continue, it's more, more so it's the
5 appellant's. So I think that's where,
6 that's where Gaye gets stuck in scheduling.
7 We could try to stack, I guess stacking the
8 appeals. Schedule 2 appeals and if one
9 doesn't go the other one goes. What happens
10 if both of 'em are continued? And again
11 y'know we've talked about this before, the
12 appellate board can be, can be a panel of,
13 of, of 3 of you, 2 of you. Or it can be a
14 hearings officer. Hearings officer,
15 officers would cost money. I don't know if
16 the department has funding for that but if
17 this board is willing to have 3 of you hear
18 the appeal on a separate, separate day and
19 just take that up that's, that's one way to
20 do it. Eventually the decision has to come
21 back to the entire board, you understand
22 that. You're not testifying?

23 CHAIR HOWDEN: So, I think let's bring it
24 up again at the next meeting. And for board

1 members to consider if they would have the
2 time and would volunteer for a 3-member
3 board member panel to hear the hearings
4 'cause we, we need to expedite this stuff
5 that keeps dragging on. Ted?

6 MEMBER YAMAMURA: What, what happened to
7 the procedure, Mike, that Scott was...

8 VICE CHAIR ROBINSON: Yeah, I was gonna ask
9 that same question. Scott, Scott, whose no
10 longer with us, had put this forward to us
11 when we were a different board, I mean that
12 there was some of us who were here and some
13 are new. But he had put that forward that
14 there would be a smaller group of us that
15 would hear appeals.

16 CHAIR HOWDEN: Well, out of the members who
17 are, John's gone, but, but out of the
18 members who are here today are there members
19 who would be willing to serve on that
20 committee?

21 MEMBER YAMAMURA: To help it along, sure.

22 VICE CHAIR ROBINSON: Sure.

23 CHAIR HOWDEN: Ok, I mean not, you don't
24 have to, right? This is a free society.

1 Well, may be the 3 of you then; Phyllis
2 Robinson, Ted Yamamura and Don Gerbig; if
3 you would, are we allowed to move into this
4 kind of thing?

5 MR. KUSHI: No, you're not.

6 CHAIR HOWDEN: You have to do it next time.

7 MR. KUSHI: It's not on the agenda.

8 CHAIR HOWDEN: Ok. So, we have to do it
9 next time.

10 VICE CHAIR ROBINSON: So we'll put, make a
11 note that we'll put that on the agenda.

12 CHAIR HOWDEN: But at least we have willing
13 board members.

14 MR. HORCAJO: Thank you very much for your
15 time.

16 CHAIR HOWDEN: Ok, thank you, Bob, for your
17 testimony. Thanks, Ed, for keeping me in
18 line. Ok. So Appeal No. 09-02. Ah,
19 counselors? Move forward. That, that's
20 Ellen, you could..

21 MR. HALL: That's Ellen's?

22 CHAIR HOWDEN: I think so.

23 MR. HALL: Oh, Ellen's.

24 CHAIR HOWDEN: Looks like hers.

1 MS. D'ENBEAU: Good morning. I'm Madelyn
2 D'Enbeau for the county.

3 MR. HALL: Isaac Hall for the appellant,
4 Michael Perry.

5 CHAIR HOWDEN: So, what's your pleasure
6 this morning?

7 MR. HALL: Well, I had submitted a letter,
8 I, I think it was circulated.

9 CHAIR HOWDEN: Yes.

10 MR. HALL: Indicating, essentially it's a
11 joint request to postpone because of the
12 discovery not complete. So, we're one of
13 those that fit into that category.

14 MS. D'ENBEAU: Yes, exactly.

15 CHAIR HOWDEN: Madelyn, any comments?

16 MS. D'ENBEAU: Ah, no, I agree that we would
17 like to postpone.

18 MEMBER YAMAMURA: How long of a
19 postponement or are you thinking...?

20 MR. HALL: I don't want a very long
21 postponement at all but I have, I have
22 talked to Gaye about the whole situation and
23 my client doesn't want to postpone for very
24 long but, Gaye, what, are you gonna report

1 on that or you want me to just, told me June
2 you guys cannot, July 22nd there's another
3 one. What was August?

4 MS. HAYASHIDA: August has another appeal.

5 MR. HALL: Another appeal and September 23rd
6 is the next available date.

7 CHAIR HOWDEN: Well, there are..

8 MR. HALL: Which is not satisfactory..

9 CHAIR HOWDEN: There are rumors that we, we
10 may be able to have a sub-committee
11 basically of the board to hear the appeal.

12 MR. HALL: Yeah.

13 CHAIR HOWDEN: And we will bring that up as
14 an agenda item next month.

15 MR. HALL: I know this isn't, I mean I think
16 it'd be helpful to have pre-hearing
17 conferences. You could sort through a lot
18 this stuff in advance and avoid last minute
19 postponements, find out who the Bob
20 Horcajo's are that don't really want a
21 contested case and move 'em along faster
22 that way. Has nothing to do with this.

23 MR. KUSHI: Mr. Chair, so Gaye, you, you
24 scheduled an appeal for July?

1 MS. HAYASHIDA: Yes.

2 MR. KUSHI: Who? Which one?

3 MS. HAYASHIDA: That is the...

4 MR. HALL: Keauhou...

5 MS. HAYASHIDA: Honua, Keauhou Honua'ula.

6 MR. KUSHI: Dana Hall?

7 MS. HAYASHIDA: Yeah, which is being
8 represented by Mr. Hall.

9 MR. HALL: Me.

10 MR. KUSHI: Oh, ok so you wanna substitute
11 that one?

12 MR. HALL: I, I can't get consent.

13 MR. KUSHI: Oh.

14 (laughter)

15 CHAIR HOWDEN: We understand.

16 (laughter)

17 MS. HAYASHIDA: Ok, there is no appeal
18 scheduled for next month. The problem is we
19 do have the orientation and we do have the
20 formal transmittal of the Lana'i Water Use
21 and Development Plan. If we could put the
22 hearing that day, I don't know what the
23 board's schedule is like and I don't know
24 how long.

- 1 MR. KUSHI: What about in August?
- 2 MS. HAYASHIDA: August we have Mr. William,
3 ah, Mr. Greg Davidge.
- 4 MR. KUSHI: But who was first? Was Perry
5 first?
- 6 MS. HAYASHIDA: Yes, Michael Perry was
7 first but Mr. Davidge has been calling me
8 and wanting and I kinda promised him August.
- 9 MR. KUSHI: Is Mr. Davidge represented by
10 an attorney?
- 11 MS. HAYASHIDA: No, not at this time.
- 12 MR. KUSHI: I would suggest put Mr. Hall in
13 that, that slot.
- 14 MS. HAYASHIDA: Put both of 'em on that
15 day?
- 16 MR. KUSHI: Well, I would suggest move
17 Davidge back.
- 18 MS. HAYASHIDA: Ok.
- 19 MR. KUSHI: First in, first y'know, first
20 in, first, first serve.
- 21 MR. HALL: Is that August, is that 26th?
- 22 MS. HAYASHIDA: August 26, yes.
- 23 MEMBER YAMAMURA: Subject to what happens
24 next meeting when we bring up the subject

1 of...

2 CHAIR HOWDEN: Yes.

3 MEMBER YAMAMURA: Sub-committee so to
4 speak.

5 VICE CHAIR ROBINSON: Right.

6 MR. KUSHI: And, and, and Mr. Chair, maybe
7 my office, I'll bring that up with the
8 litigation section if they would want to
9 double stack the appeals.

10 MS. D'ENBEAU: Yeah, that's an interesting
11 idea. I think that, if I could, just
12 briefly, we do subpoena witnesses often to
13 come and that was ok 'cause we had people
14 subpoenaed for today and we just called and
15 told 'em it's gonna be postponed. So I
16 think it might be workable. It does seem a
17 shame to leave a slot open after you're all
18 ready to go on and so there's 3 of us that
19 work on these cases and I can't speak for
20 the other 2 but I think it's workable.

21 MR. KUSHI: And logistically, we need a
22 court reporter here too, so.

23 CHAIR HOWDEN: Ok.

24 MR. KUSHI: Gonna have 'em here, we should

1 have at least an appeal. That being the
2 case, Mr. Chair, I suggest, subject to the
3 parties agreement, re-schedule this for
4 August, tentative.

5 MR. HALL: That's fine.

6 MR. KUSHI: And we'll send you a notice of
7 hearing.

8 MS. D'ENBEAU: Thank you very much.

9 MR. HALL: Thank you.

10 CHAIR HOWDEN: Ok, thank you. Ok, no
11 Unfinished Business. Ellen Kraftsow. So,
12 Kraftsow. Only taken a little over 4 years.

13 MS. KRAFTSOW: It, it, it un, decided to
14 stop.

15 VICE CHAIR ROBINSON: Focus. Much better.

16 MS. KRAFTSOW: Straight exactly; it's
17 always a little crooked but.

18 CHAIR HOWDEN: Can we take it that's the
19 Lana'i Aquifer in the background?

20 MS. KRAFTSOW: Ah, yes, something like
21 that.

22 CHAIR HOWDEN: Ok.

23 MS. KRAFTSOW: Should I start? Or just...

24 CHAIR HOWDEN: Please.

1 MS. KRAFTSOW: Just go?

2 CHAIR HOWDEN: Yeah.

3 MS. KRAFTSOW: So this is about the Lana'i...

4 CHAIR HOWDEN: Oh, wait a second, Ellen, I
5 think Gaye might need to get a mike near
6 you.

7 MS. HAYASHIDA: Yeah, hang on, sorry.

8 (silence as microphone is adjusted and
9 moved)

10 MS. KRAFTSOW: Now?

11 CHAIR HOWDEN: Please.

12 (at this time a powerpoint presentation
13 summary of the Lana'i Water Use and
14 Development Plan was given by Ellen
15 Kraftsow, Water Resources and Planning
16 Manager)

17 MS. KRAFTSOW: Ok. So thank you. I'm
18 Ellen Kraftsow with the Department of Water
19 Supply. This is about the Lana'i Water Use
20 and Development Plan that will be
21 transmitted to you next month. So just to
22 give you a little roadmap of what's in the
23 plan, there's an executive summary that is
24 still actually being updated. There's a

1 summary of the regulations and rules that
2 apply to the plan itself and also that the
3 water company has to deal with as they move
4 forward. There's a section that describes
5 the existing resources and systems on
6 Lana'i; section that describes the demands,
7 historical, existing and projected. And
8 that also includes build out. There's a
9 section that describes the different options
10 that we've identified for source. And both
11 new source options and offset of new source
12 by conservation and efficiency measures.
13 There's a section that describes resource
14 protection because that was identified as
15 one of the top priorities of the group and
16 there's actually a fairly long chapter on
17 Watershed Protection for Lana'i. There's a
18 section summarizing the policy issues and
19 recommendations and implementation matrix
20 and a lot of appendices including a few
21 draft ordinances. I won't go into the
22 requirements much except to say I know that
23 some people wonder why we're doing this when
24 we have no meters here. Sorry. There are

1 requirements, Article 11 of the state
2 constitution for one, requires that the
3 state and its political subdivisions which
4 are the counties, protect resources.
5 Statutory requirements are in the state
6 water code. There's also Hawaii
7 Administrative Rules and also guidance that
8 have been issued in the form of, it's called
9 the Framework for Updating the Hawaii Water
10 Plan and that is on the web, at the DLNR
11 website. The charter assigns water resource
12 protection and management to the Water
13 Department and the code is a little bit
14 outdated but the code 2.88 addresses the
15 Water Use and Development Plan. We're
16 required to be consistent with the state
17 water plans, including the Water Resources
18 Protection Plan, the Water Quality Plan, the
19 Water Projects Plan, the Agricultural Water
20 Use and Development Plan and the Department
21 of Hawaiian Homeland plans as well as we're
22 required to be, obviously the slide is
23 outdated. We now have an updated Maui
24 Island Plan. But we're required to be

1 consistent with the county's plans too,
2 except for the General Plan, those are all
3 accurate. So, going to groundwater on
4 Lana'i, there's a total of 6 million gallons
5 on Lana'i, with if you can see the light
6 green, windward and leeward aquifers, pretty
7 much all of the fresh water is believed to
8 be there. It's 6 million gallons divided
9 into those 2 systems of 3 million gallons
10 each. This is maybe a little bit hard to
11 see but you can see the wells that pump on
12 Lana'i relative to the aquifers. The aqua
13 colored triangles are the old Maunalei
14 shafts. Recommissioning those is one of the
15 options that we looked at but they're in the
16 windward side. Other than that there's only
17 one well that's on, out of the windward of
18 aquifer. The rest are, come out of the
19 leeward aquifer of Lana'i. So 85% of
20 withdrawals come from the leeward side of
21 that aquifer. Um, I went the wrong way,
22 sorry. So, basically from the leeward
23 aquifer right now there's 1.9 million
24 gallons a day coming; the windward aquifer

1 point 3. This, this slide shows the wells
2 too but I thought it wasn't that visible.
3 There are 7 sources active now. As of the
4 time that I drafted the report and still
5 now, in 1996 the state did a model of the,
6 of Lana'i and at that time they modeled
7 distribution of withdrawals between 13
8 sources, so there's been some sources that
9 have gone down and some that didn't pan out
10 since then. That model indicated that
11 pumping should be ok up to 3.52 although
12 additional distribution or deepening of
13 wells might be required. Right now, with
14 the existing distribution water levels in 4
15 of the wells are declining. The model also
16 showed that the aquifer's highly dependent
17 upon the forest. About 50% of its head
18 relies on having an intact watershed forest
19 and the forest is also declining on Lana'i.
20 There's also historical documentation that
21 once upon a time Lana'i was quite a
22 different place. There are taro lo'i; there
23 were perennial streams; there were 3-foot
24 tall flightless birds; there are

1 descriptions of springs and streams
2 including a pond at the top of the hale and
3 springs and seeps that would run during a
4 rainfall so much so that people had to take
5 canoes in the palawai, which if anyone's
6 been to Lana'i is just astounding to me. So
7 there were lo'i springs and, and seeps and
8 intermittent streams and even flooding in
9 some areas. So Lana'i was once a much
10 wetter place than it is now. It has no
11 surface water at all anymore really. But
12 like I said there's evidence of historical
13 surface water and the bottom right thing,
14 it's too hard to see the scale, but the dots
15 are heiau where, are homesites where people
16 were indicating there was probably water
17 available in those places. I don't know
18 what that slide's doing here. Hang on.

19 CHAIR HOWDEN: That's one of our most
20 famous department slides.

21 (laughter)

22 CHAIR HOWDEN: Yeah, you see it everywhere.

23 MS. KRAFTSOW: I, I like a couple of 'em, I
24 keep repeating, I'm sorry.

1 CHAIR HOWDEN: Yeah, it's ok.

2 MS. KRAFTSOW: But it, it won't, I don't
3 know what's going on with computer.

4 MR. KUSHI: Careful, what else you got in
5 there?

6 CHAIR HOWDEN: A mind of its own.

7 VICE CHAIR ROBINSON: Really, exactly.

8 MS. KRAFTSOW: Ok. So this, I'm gonna have
9 to stand up, you'll just have to bear with
10 looking at me for a minute 'cause I don't
11 have one of those pointy things but. The
12 green I'll get to later. That's actually
13 the area where they're fencing the
14 watershed. The dark blue is, that goes by
15 Lana'i City and Manele, but that's potable,
16 chlorinated drinking water. This other
17 kinda blue here, that's also fresh water.
18 It's just not chlorinated right now and
19 they're moving their chlorination point so
20 soon that will be chlorinated. The purple
21 lines are reclaimed water and the aqua
22 colored lines are brackish water. So, if
23 everybody can see that. I think the next
24 slide has the sources so I'll save it for

1 that. Didn't go down. Oh, this was, I
2 showed you this one because a lot of people
3 were thinking that this portion of the
4 system could be abandoned but these pink
5 stars those are meters that are still
6 existing on the old Palawai grid. So the
7 dotted line's actually are abandoned but the
8 solid light blue light is, is not abandoned
9 and still has meters so they're not planning
10 to abandon them. And the dark blue lines on
11 the upper left side where Lana'i City and
12 Kaunapali, Maunalei those are served right
13 now by Wells 6 and 8. Well 3 is down which
14 is very convenient for this analysis. The
15 dark blue lines down in Manele are served by
16 Wells 2 and 4 as are these, the lines in the
17 Palawai grid are also served by Wells 2 and
18 4 so that is not brackish water. That's
19 fresh water going to the Palawai grid. But
20 to the airport end. And then just the
21 brackish from Wells 1, 9 and 14 that comes
22 down to Manele is the light blue, the aqua.
23 So, this is kinda showing the districts.
24 You can't even really see Koele much. Koele

1 is kinda green right above Lana'i City.
2 Lana'i City I showed you already.
3 Kaumalapau's going down from the city.
4 There's a line. This is kinda their service
5 districts that have to do both source and
6 pressure zone. The pink is Manele. The
7 brackish is brackish that serves Manele.
8 And the purple is reclaimed. It's kinda of
9 a duplicate. I should've left it out.
10 (Beep)
11 MS. KRAFTSOW: Why does it keep doing this?
12 (silence)
13 MS. KRAFTSOW: Sorry. So, an overview of
14 the system condition. Lana'i does not meet
15 system redundancy standards for source in
16 Lana'i City, of course neither do we,
17 neither have we ever. But you want to plan
18 to meet them so it's important information
19 anyway. Kaumalapau is a very old line;
20 that's substandard with fire protection in
21 it's tank. The brackish system is, when I
22 did my Unaccounted For Water Analysis that
23 comes, I'll describe it in a minute, but it
24 turned out that there was some pretty high

1 losses in certain places and through that
2 they identified some unmetered uses. The
3 Palawai Irrigation Grid was the big news.
4 It is in such poor repair that the losses
5 are really quite high which spells a very
6 good opportunity for source. The water
7 utility financially is not able to support
8 itself with its rates and fees right now.
9 They don't cover operations and are not
10 sufficient to make the improvements needed.
11 So, the water utility is partially
12 subsidized and supported by its parent
13 company. In terms of what it costs to run
14 the wells, this looks like it skipped a
15 slide but in the irrigation grid right now
16 the levels cost about a \$1.71. This is just
17 the operation, operating costs of the well,
18 just the marginal cost not the cost of the
19 entire administration of the system and
20 everything, just the wells relative to each
21 other. Koele and above Lana'i City, about
22 230; Lana'i City, 212. I already said, the
23 irrigation grid, the freshwater and
24 irrigation grid about 177; and Manele about

1 177, same sources.

2 MEMBER GERBIG: Is that 177 per thousand
3 gallons or what is it?

4 MS. KRAFTSOW: Yes. Yeah, sorry. This is
5 kind of a, it's a funny looking graph but it
6 really shows you what wells are economical
7 in a more visual way. The shorter the bar,
8 these bars, the top black bar represents the
9 spillway of the tank or if there's no tank,
10 the ground, but the highest level that the
11 well has to pump to. The next bar is the
12 ground elevation where they are separate;
13 sometimes there's, that's why you sometimes
14 see only one bar at the top. The heavy blue
15 bar is the high level water which is thought
16 to be the sort of static water level
17 equivalent to monitoring the aquifer. And
18 the low, the skinny blue bar which you don't
19 always see but it is the low water pumping
20 level which you need to know both for
21 calculating the cost of pumping the well and
22 for whether or not you're pumps gonna
23 cavitate. Then there's the pump intake or
24 elevation is the second to bottom bar and

1 the bottom of the whole. And in couple
2 places there's a dotted line, that's where
3 the pump was recently lowered from that
4 point to a lower point. So what this graph
5 shows you among other things is that Well 2
6 would be extremely economical to run because
7 the lift is so much smaller than every else,
8 if it didn't have safety issues. I meant to
9 put a picture of that in here but I don't
10 know if it made it. I already told you
11 about plotting the water levels and
12 chlorides. So basically, looking at this
13 picture embarking on this plan my first
14 impression was basically this, just what are
15 they gonna do? How are they gonna do this,
16 y'know, how can they, without just being
17 subsidized, continuing...? But actually when
18 I got the billing data it became very clear
19 in an instant what they can do. Because
20 they're losing 44.6% of the water that they
21 pump out of Wells 2 and 4. And that's like,
22 Wells 2 and 4 pump like 6 hundred and, wait,
23 I have it exactly. Wells 2 and 4 pump
24 683,000 gallons a day and of that 375,000 is

1 metered. And the numbers won't be exact
2 because this is averaged losses over time.
3 It's done correctly though. Those are the
4 losses that they have. And so, being able
5 to do that breakdown really gives you some
6 hints as to what you can do for the system.
7 A couple of other relevant pieces of
8 information, at the top graph on the right
9 shows you that there's a big seasonal
10 variation which indicates that there's a lot
11 of irrigation use and basically out of 1.65
12 some, 1.658244 gallons per day, million
13 gallons per day, sorry. About meter, that
14 metered consumption, about 1.13 or 1.132
15 goes to irrigation. Of that 1.132 only
16 44,400 is used for ag. And if you add the
17 reclaimed water there's about 1.426. So
18 Lana'i, most of Lana'i's water use is
19 irrigation. Looking at the 2 bottom graphs
20 those are, it, it's looking at whether or
21 not wastewater could be a viable source.
22 And the top lines are taking the projected
23 build out proposals from the company and
24 applying standard wastewater standards to

1 that and what the resulting wastewater
2 availability would be to use for source.
3 And the bottom lines are just taking the
4 existing wastewater production and applying
5 the community plan forecast factors to it,
6 escalating it according to community plan,
7 socio-economic forecast factors that were
8 derived from Carl, from SMS adapted by Carl
9 for water. So after looking at that whole
10 picture, I concluded that it didn't make
11 sense to do projections on pumped water. It
12 made more sense to do projections on metered
13 water, identify a reasonable unaccounted for
14 water percentage that was viable after
15 discussion with John, the director, about
16 ok, where do we think these losses come from
17 and how can, what can be fixed and figuring
18 it out. So this the final conclusion for
19 demand was a range between 2.5 and 3.9, I'm
20 sorry, and 5.03, with the probable case
21 running between 2.6 and about 3.5, and this
22 was broken down further in different ways
23 so, oh, I'm sorry this is the wastewater
24 projection. This is their, this is out of

1 order, just ignore those slides. I added
2 those at the last minute, never do that.
3 Ok, so after you get kind of the range of
4 anticipated projection then you have to
5 figure what was source needs be, assuming
6 you have to meet standards, you need to
7 have, meet demands with the largest pump out
8 and you have meet it in 16 hours pumping, 16
9 hours pumping with the largest pump out, to
10 end 16 hours. Max, you have to meet max day
11 demand in 16 hour pumping with the largest
12 pump out, I'm sorry. So it works out to
13 your 2/3 of 2/3. So this was, ok, to meet
14 this meet this demand what kind of installed
15 capacity would you need to have? Ignoring
16 which was the largest pump. And then, ok,
17 if that's the capacity you have to have, how
18 much more do you have to install to get
19 there, right? You get that, so step 1 is
20 what's the demand; step 2 is ok, what
21 capacity would you need to meet that and
22 step 3 is ok, what capacity, what, what's
23 that capacity minus what you already have,
24 so y'know the difference which is what you

1 need to put in. And then taking that
2 information, look at their base plan and
3 their base plan was already enough that it
4 could meet the projection but there was some
5 problems in that, first of all, it couldn't
6 begin to meet their own projected build out.
7 It could meet reasonable time trend or
8 economic, socio-economic trend, econometric
9 trend. But they were gonna be putting more
10 wells all in the leeward aquifer, which
11 obviously isn't gonna work where one of
12 those aquifers will be designated. So...
13 (laughter)

14 MS. KRAFTSOW: Oh, my god. It just wants
15 me to hurry up so I will. Basically having
16 figured out what they needed the next step
17 was how do we give it to them. And so, the
18 bottom line of the, of that whole story was
19 gonna be that you plan, you put in the plan,
20 I put in the plan enough sources for, to do
21 their whole build out but in terms of timing
22 and scheduling it and designing a rate
23 around it I did it based on what I thought
24 was a more likely scenario. And so the

1 sources that were identified were, well,
2 should I describe them, it's not gonna mean
3 much anyway but their wells, ok. Sorry.
4 Wells on the far end, on the north end of
5 the windward aquifer, get you into the
6 windward aquifer without having to go back
7 into Maunalei Shaft. If Maunalei Shaft
8 could be recommissioned that was looking
9 promising. Basically we sited wells
10 throughout the windward aquifer and a few in
11 the leeward aquifer for distribution and
12 made specific recommendations about some of
13 them. Like the ones that are down towards
14 the Manele end, you see the, I don't know if
15 you can see it but the proposed transmission
16 line wraps around the outside of that
17 watershed. That's really why that watershed
18 is there, to show you that's some of the
19 most critical habitat that they have
20 remaining and so you wouldn't want to put a
21 transmission corridor exactly through it
22 that would finish their forest pretty much.
23 The ones in Maunalei Shaft look financially
24 promising and possible but in the area of

1 Mauanlei Shaft and the next gulch but that
2 is where there used to be lo'i and there are
3 still some land use commission awards.
4 Lana'i actually had 110 land use commission
5 award applications and 56 awarded land use
6 commission kuleanas. So there are still
7 people who are concerned with that. Then, I
8 guess this is hard to see but basically in
9 the plan you'll see it. I took the, all of
10 the new sources in order of least to most
11 cost and looked at what was most cost
12 effective. And then also some of the
13 conservation opportunities and looked at,
14 this is loss reduction; this is things like
15 replacing certain pipes and putting a cover
16 on uncovered reservoir that's in the hot
17 sun. And then demand side management, this
18 is Carl's work; I'm sure you can recognize
19 this one; grouped by what types of measures
20 would be effective. And actually with the
21 indoor conservation we did an analysis,
22 well, he did an analysis and I made some
23 revisions up, basically to update it. They
24 came up with about 175,000+ gallons in

1 technical potential for indoor fixture
2 replacements too. So, one of the, one of
3 the main things that they can do is this
4 waterline is leaking so badly, this red one,
5 this is if you picture a rainbow, the most
6 critical thing is in red and then orange,
7 yellow, green, blue, indigo, violet. So
8 that red line is, is Palawai Grid
9 replacement line. Fixing that line we
10 estimate might save as much as 200,000
11 gallons a day. It's breaking to the point
12 where it's broken for weeks on end. They
13 have to come down there often. It, it's,
14 it's in bad shape and they're already
15 starting to fix it. So that was priority
16 number one. So as part of this program, we
17 identified how can you save this water. And
18 it's going the wrong way. And also things
19 like replacement needs. This is the Hi'i
20 Reservoir on the top left. That's actually
21 a groundwater reservoir, so they're pumping
22 fresh groundwater and putting it in a lined
23 reservoir. And the Hi'i Tank. Those both
24 need to be replace into 2 million. And

1 after looking at like sort of their overall
2 needs for source and pipeline replacements
3 and conservation measures, in order to fund
4 those programs, how much money do you need
5 and we came up with not a rate that they'll
6 go issue tomorrow but like a 20 year rate
7 estimate of what kinds, what, what kind of
8 money would they need and is it possible for
9 them to actually support themselves, become
10 self-sustaining water utility and the answer
11 is yes, they can, they could. But they'd
12 have to do some things. One is they have
13 really high unaccounted for water and high
14 irrigation use, leaking pipes, high per unit
15 consumption. So, this is really, really
16 getting corrupted but anyway, identified
17 about 485,000; maybe this will work. I
18 don't want it...No.

19 (silence)

20 MS. KRAFTSOW: Four hundred eighty five
21 thousand gallons in conservation savings
22 that they could do which out of y'know,
23 right now their current pumpage is about
24 2.24 million gallons a day. So that's a

1 pretty big chunk for them. That's a really
2 big chunk for them. That's more than a
3 well, that's 2 wells for them. They have
4 because of the low sustainable yield the
5 declining water levels, the diminished
6 distribution of withdrawals, 7 sources
7 versus 13, the increasing chlorides in the
8 brackish, in the brackish, one thing I meant
9 to show you with that blue graph is that
10 some of the brackish wells they've had to
11 lower the pumps several times, like 400 feet
12 in the last few years and every time they do
13 that that well becomes more expensive to
14 pump aside from everything else 'cause it
15 has a bigger lift. An analysis of the
16 project districts indicates that if they
17 build out all the project districts that
18 they have Phase 1 approval for at the unit
19 use rate that they're using now they would
20 exceed their sustainable yield. But the
21 proposals actually include elements that are
22 even in the project districts as well as
23 leaving out some elements that are in the
24 project districts. And there is a statewide

1 trend of diminishing precipitation and
2 rising inversion layers. So Lana'i more
3 than any other district, more than any other
4 island, Lana'i really has some serious water
5 issues, water availability issues pending
6 within this planning period. The aquifer
7 needs protection, monitoring the
8 recommendation is that the use of the
9 resource should be careful and deliberate.
10 We did come up with an allocation policy and
11 operational guidelines, recommended which
12 the state water commission does anyway, a
13 10% reserve in each system so that out of
14 each 3 million gallon aquifer they would
15 pump only 2.7 million or not exceed that.
16 Recommended continued watershed protection,
17 wellhead protection, revised their base plan
18 to include conservation, and to include a
19 windward aquifer well. Why is this going up
20 instead of down? Oh. And basically we came
21 up with an allocation proposal. That state
22 had set a trigger at one point that at 4.3
23 million gallons per day, they would be
24 designated and so part of my job is to see

1 could they build out their project districts
2 or substantial chunk of them without
3 exceeding 4.3 million gallons a day pumped,
4 even though an analysis of the demands they
5 would have would be over 7 million gallons a
6 day. They only have 6 million gallons a day
7 but all of that has to be met with pumped
8 water. Some of that can be met with
9 conservation. Some of that can be met with
10 reclaimed water. Some of that can be met
11 with desalinization. But what I didn't want
12 to do was have their proposals from 2006 and
13 2009 from Castle and Cooke had 1.3 million
14 gallons in alternative sources without
15 identifying them or 1.5 million gallons in
16 2009. I didn't wanna to go there. So this
17 is can we identify real genuine potential
18 sources that would take them that far. And
19 this was, this is the likely recommended
20 plan. And I don't think you can see but
21 I'll just tell you that it goes up a total
22 pump, a total demand in, by 2030 of about
23 just under 5 million gallons. At build out
24 it goes up to about 6.4 million gallons

1 which is more than sustainable yield. But
2 the actual pump demand by 2030 is only 3.2
3 and by build out is only 4.3, roughly. Just
4 under, stays, just squeaks under 4.3. So
5 the proposal involves the use of reclaimed
6 water in Lana'i City; continuing the use of
7 it at Koele and then when Wiki Basin get
8 build out, taking some reclaim water down
9 there and offsetting some of their
10 irrigation down there. Eventually reclaimed
11 water from Lana'i goes all the way down to
12 Manele. Manele has its own but it's not
13 growing much. Only about 11% of pumped
14 water makes it to the, in, in, for the
15 Manele District actually makes it to the
16 Manele Treatment Plant. And there are
17 reasons for that. So there's this
18 allocation policy which uses the base case
19 forecast from the community plan. It seemed
20 a good reasonable estimate and it adds in
21 some projects that are known where they see
22 what the base case forecast would allow.
23 And it uses an elasticity of 1.5 to be
24 conservative, which means that for every

1 unit of use, for every new unit of use uses
2 about 1 and 1/2 times as much as a, as an
3 existing unit. So it puts in some
4 conservative estimates. It has a 485,000
5 gallon a day conservation target. It also
6 recommends a 500,000 gallon per day
7 agricultural reserve which is water that is
8 set aside for agriculture but may be used;
9 there's an ag park there that was very
10 important to the community. It sets aside a
11 600,000 gallon per day resource reserve, 300
12 gallons per day in each aquifer. And that,
13 the way that's implemented is when the wells
14 come due to be online there's a schedule and
15 a plan. And it recommends a condition that
16 build out approvals be contingent upon
17 continued satisfactory progress on the
18 Lanaihale fence. So a lot of questions came
19 up about how would you implement this. You
20 can build out, what basically this boils
21 down to is you, you can't, within the
22 planning period you cannot build out the
23 entire project district but you can build
24 out anything which has a Phase 2 approval.

1 This project district was, they were, they
2 were started in 1986 and one of them for
3 instance has 535 single family units but has
4 only built 16 of them. So there's a lot
5 room for growth still in this project
6 district and even to get to their Phase 2
7 approval there's hundreds of units they
8 could still build. So, you can't, if you
9 want to do something that's not in the
10 existing approved project district you would
11 have to make an exchange for something. You
12 can only drill if the source is identified,
13 drill tested and proven, not just a paper
14 source. Water levels have to be acceptable
15 and not declining further. Watershed
16 protection should be in progress as well as
17 an annual system audit and conservation
18 measures underway. It would not allow
19 projects beyond Phase 2. It would allow
20 projects beyond Phase 2 if all of those
21 other conditions are met and Phase 2 is
22 built out. So you get to the point where
23 you finish Phase 2 and you really need the
24 additional growth and the water levels look

1 ok and everything looks ok then it does say
2 ok. But under any case no matter what's ok
3 if the watershed protection program stops
4 it's not, it doesn't, so does development.
5 So then the next question people started to
6 discuss was how do you actually implement
7 this, y'know. So there's, there was some
8 disagreements about what the table meant and
9 everything. So among other things one of
10 the things we did was to map the project
11 district, so here, everything that says sort
12 of a dark maroon is actually built.
13 Everything that's colored at all has a Phase
14 2 approval at least. And some of the
15 projects basically all the ones that are in
16 sort of an aqua color also have Phase 3
17 approval. But they have Phase 3 approval.
18 They're noted there but like in one case
19 there's 14 lots on that street and they were
20 all part of the map but the approval itself
21 only says 11 lots there are approved. And
22 so one of the things that we're working on
23 is getting a map that explains very clearly
24 what has Phase 1, Phase 2 and Phase 3

1 approvals. So some regulator can just look
2 at it and say ok, this is what you already
3 can approve and this is what if they want an
4 approval on this you have to discuss.

5 MEMBER YAMAMURA: That's Manele?

6 MS. KRAFTSOW: Yeah, this is Manele. There
7 are also triggers within the allocation
8 tables so like at 2010, y'know there's
9 different agreements that allow them to take
10 800,000 gallons of pumped brackish water,
11 650 for the golf course, 150 for other
12 purposes, was the agreement. But at the
13 time there was also, it went up to 1.05
14 million from alternative sources. So they
15 really are saying they need 1.05. So it
16 allows them to take more until other sources
17 are developed and identifies what sources
18 are developed when and how much more they
19 can take. The Palawai Grid repair has to be
20 done by 2015. They're already starting on
21 it, 'cause they know it actually is a cost
22 effective measure for them too; much more
23 cost effective than, than new source.
24 That's what the analysis showed. Cover for

1 the brackish reservoir and annual water
2 audit; based on the projected use rates they
3 would have to have a new well in the
4 windward aquifer by 2025. It doesn't like
5 they're going fast but if they do their
6 build outs scenario they'll need new source
7 much faster than that. If all conservation
8 reserves are followed they, it won't need to
9 be designated within the planning period.
10 If they do build out with the full project
11 district plus the proposal that they're
12 asking for not only will it have to be
13 designated within the project period but
14 also the new meter fee would be exorbitantly
15 high. They could not support and sustain
16 that. Like the water utility itself cannot
17 do that, that would have to be developer
18 funded. So, again comes back to this issue
19 of can they be self-sustaining or not. Also
20 in the plan, I've already talked about
21 watershed protection, it's going on long,
22 it's several iterations. The reason that's
23 so important is if you look at the top left
24 that's relatively intact mesic Lana'i native

1 forest and as you go down to the right the
2 waiowi and the menuka start coming in until
3 you lose your understory and the ground
4 becomes kinda hard packed and graded and the
5 soil that's under the stuff on the top left
6 is, is rich and dark and, and, and sort of
7 graded and the soil is y'know, by the time
8 that bottom right has been completely
9 denuded by goats too; that's old but even
10 the second from the bottom right. The soil
11 doesn't absorb; it's hard pan; it's changed
12 completely and that changes the quality of
13 your watershed and your recharge too. So
14 for Lana'i this was actually deemed to be
15 one of the most important issues for their
16 plan because they really have such a small
17 aquifer and such a small margin. Other
18 recommendations that continued venue for the
19 community to keep discussion and being
20 involved, discussing and being involved;
21 some changes to the way they keep their data
22 so that ongoing audit is possible. The rate
23 design should be equitable, a tiered rate
24 structure and one that doesn't over burden

1 the citizens of the city, a low lifeline
2 amount. There are some issues that are
3 identified specific to given sources like
4 the habitat one and the kuleana one I
5 mentioned; ongoing watershed and wellhead
6 protection. The wellhead, it also has a
7 draft, Wellhead Protection Strategy that was
8 written by Eva, on our staff. It's an
9 overlay zoning ordinance with in some cases
10 performance standards; you can do a certain
11 use if you meet these best management
12 practices. There are some guidelines for
13 development in areas where y'know
14 encouraging developers basically to put the
15 less intensive uses near the well and the
16 more intensive uses away from the wellhead,
17 a model wellhead protection area. Best
18 management practices and land use agreements
19 that allows for all of those things. I
20 think you all know the kinds of things that
21 can contaminate your aquifer; pesticide
22 storage and nitrates and fertilizers and car
23 shop, gas stations, etcetera. So what,
24 what, what basically we had, the wellhead

1 protection area is modeled that's the amount
2 of time y'know in some cases if a waterfall
3 is here it will reach this well, if a drop
4 of water falls here it will reach this well
5 within 2 years, 5 years, 10 years. There's
6 a thousand foot radius that is consistent
7 with some DOH requirements. There's a 2
8 year time of travel, a 10 year time of
9 travel and on Lana'i also a 25 year time of
10 travel by community request. Then she
11 identified historic and existing potential
12 contaminants sources within, within those
13 areas. This is some of them. And then with
14 decrease, the restrictions decrease with
15 distant from the well. And it would need,
16 it would be, because it's an overlay
17 ordinance it would need coordination with
18 Planning and other agencies. So that's one
19 of the recommendations and I won't go into
20 it in too much detail but that's also in the
21 plan. And that's it. So, thank you. And
22 now it doesn't come up, yeah?

23 (laughter)

24 MS. KRAFTSOW: Sorry, that was kinda long.

1 DIRECTOR ENG: So Ellen, therefore it
2 doesn't look like they need to be designated
3 in any time during this timeframe that
4 you're looking at.

5 MS. KRAFTSOW: If they follow this plan
6 they don't need to be designated. From what
7 I can tell, this is just my impression and
8 of course you'll have different impressions
9 from Castle and Cooke 'cause look what just
10 happened with the vote, right? But it seems
11 to me that, that the water director there
12 liked the plan, is using it, is actually
13 gone and some of these sites that we
14 identified he's like kinda gone and surveyed
15 them more closely and said well what if we
16 adjusted here and here but he's moving in
17 those directions; already fixing the well,
18 already used some the analysis we sent him
19 to go justify his leak detection equipment
20 and stuff and so I think that the plan is
21 viable. Whether the rate will fly, whether
22 they will live with the allocation table
23 that I'm proposing, I don't know. But I
24 think that I, well, I have to admit my own

1 environmental leanings I think that in this
2 case I've been really, really, really,
3 really careful to be neutral and probably
4 even made a table that allows more than I
5 would think should be given the magnitude of
6 their lack of water. So, yeah, they don't
7 need to be designated if they do that. Will
8 they do that, I don't know.

9 CHAIR HOWDEN: Ok, we, we've had a request
10 for 10 minute break, a strict 10 minute
11 break because 2 members have to leave by
12 eleven but we may well be done by eleven, so
13 let's take a conscious 10 minute break and
14 then we'll be back. Yeah, and would you
15 stay, Ellen, so we could...

16 MS. KRAFTSOW: Oh, ok.

17 CHAIR HOWDEN: Bother you with more
18 questions? If you have the time.

19 (recess)

20 CHAIR HOWDEN: Ellen, you gotta speak up
21 now 'cause we're back in session.

22 MS. KRAFTSOW: Sorry.

23 CHAIR HOWDEN: No, I mean speak up. It's
24 ok. Don probably has some good questions

1 for you.

2 VICE CHAIR ROBINSON: Yeah.

3 MEMBER GERBIG: Well, I, I just know that,
4 we're just talking but the questions I had
5 were how much, y'know, how much of the, of
6 recycled water or are they, are the
7 recycling, I mean talking about sewer water,
8 are they, are they recycling all the sewer
9 water they can or, or are they still running
10 with a bunch of cesspools that good be put
11 into a plant, give them more water?

12 MS. KRAFTSOW: I think they're pretty much
13 sewered for the most part, there, there are
14 a few little cesspools but y'know, like
15 Palawai wouldn't even be cost effective or
16 Kaumalapau to bring that sewer line all the
17 way from there. But...

18 MR. KUSHI: That sewer line is run by the
19 county, sewer system.

20 MS. KRAFTSOW: Well, actually there's a
21 county sewer system that feeds to an
22 auxiliary plant that treats it to just under
23 R-1 and then the auxiliary plant feeds the
24 Koele Golf Course and the auxiliary plant is

1 run by the company. And then down at Manele
2 also the sewer is run by the company. And
3 between the 2 of 'em, 294,850 gallons a day
4 of reclaimed water is used on the 2 golf
5 courses. Now the, the auxiliary plant does
6 produce a little bit more water than it
7 sends to Koele but not a whole lot; it's
8 very seasonal and also there's some problems
9 with the data like there are a few places
10 where the effluent produced exceeded the
11 influent which can happen on a daily basis
12 or maybe even a monthly basis but not on an
13 annual basis. So there's some, there's some
14 data issues there but basically they have
15 enough, they have enough for their normal
16 needs at Koele out of the plant now. They
17 still have some drought and dry season
18 shortfall. But within the 30 year period
19 they should have enough to serve both Koele
20 and send some down to Ni'i and some down to
21 Manele. Sorry, more answer than you wanted.
22 VICE CHAIR ROBINSON: You mentioned the
23 fen, fence, is, is the deforestation caused
24 by animals or what's the...?

1 MS. KRAFTSOW: There's, one of the things
2 in the plan is like a whole chronology of
3 the watershed on Lana'i and basically Lana'i
4 had no habitation 'til about the 15th
5 century, in the 1400's the Polynesians came
6 and already when they came there were
7 certain diseases spread to certain birds and
8 things and then I guess Europeans came in
9 the 1800's and soon after they brought with
10 them goats and cows and those pretty much
11 decimated and created moonscape and then
12 they eliminated the goats but they still
13 have deer and sheep. Yeah. And the, so
14 those they, they graze and they rub against
15 trees and break the bark and they spread
16 weeds and they also have weed issues. And
17 then when your invasive weeds come in often
18 the understory and soil are not in the same,
19 are not the same quality as they were. So
20 they have a combination of, it's mostly been
21 I think the grazing but there've been other
22 factors too.

23 VICE CHAIR ROBINSON: So, so grazing by
24 wild animals or grazing, these aren't, are

1 these domesticated animals?

2 MS. KRAFTSOW: Well, they maybe started as,
3 but no, they're feral.

4 VICE CHAIR ROBINSON: They're all feral
5 now. Do they have active hunting program...?

6 MS. KRAFTSOW: They have a hunting program
7 but what I hear, well, what I hear from the
8 company, what I hear from people, not just
9 at meetings but outside the meetings, in the
10 restaurants and this and that, is that there
11 are lots of deer now. They're not really
12 controlling them. They're not even really,
13 it's, the hunts are not enough to manage
14 them, even within the Hale. There's,
15 there's just not, they're not under control.
16 They're spreading and since the less, they
17 started with the fencing, they started with
18 the easiest place to fence but that was not
19 the best intact watershed but since it is
20 fenced then the more intact watershed
21 becomes more accessible. So, there's a lot
22 of controversy and heat in the community
23 about whether they'll even be able to save
24 it in time and there's a document out that

1 looks at the value of Cooke pines and they
2 are very valuable but one of the places
3 where Cooke pines would be most suited to be
4 planted is exactly where this most intact
5 native forest is which sort of makes
6 people's stomachs fall out because y'know
7 are they just gonna let it go and then plant
8 Cooke Pines; and some people wonder, I mean
9 hopefully not.

10 VICE CHAIR ROBINSON: Is there any cross
11 fertilization between our, our, Arthur
12 Medeiros' watershed project that's here and,
13 and, and the one, what they're trying do...?

14 MS. KRAFTSOW: I keep wishing that there
15 would be more. There, I haven't seen Art go
16 over but Jay Penniman from DLNR here is very
17 active over there and has been doing some
18 really good work. The Nature Conservancy is
19 kinda out and I guess there are people in
20 the community pretty kinda upset about that
21 'cause they, they, when, when the
22 partnership started they became very
23 involved and they kinda just dropped off the
24 face of the earth. I would say probably Jay

1 Penniman is the most, and his crew are the
2 most active over there outside of the
3 company's crew.

4 VICE CHAIR ROBINSON: So they've had quite
5 a bit of success in the 3 areas that they've
6 created.

7 MS. KRAFTSOW: Yes, and he's having success
8 in his little areas but y'know funding is
9 always an issue.

10 VICE CHAIR ROBINSON: Of course. I mean
11 Arthur's crew is all volunteer.

12 MS. KRAFTSOW: Yeah.

13 VICE CHAIR ROBINSON: They have a waiting
14 list for volunteers, that's how...

15 MS. KRAFTSOW: It would be good to get them
16 to talk to him, yeah.

17 VICE CHAIR ROBINSON: Yeah.

18 CHAIR HOWDEN: Any other questions? Ok,
19 Ellen, thank you so much...

20 MEMBER GERBIG: No, I, I, I was talking to
21 Ellen and it appears what your numbers and
22 what she says to me is that due to our lack
23 of rainfall the wells are all dropping and
24 the brackish wells are going to get more

1 salty, that's the normal...

2 MS. KRAFTSOW: No.

3 DIRECTOR ENG: Actually, if I may interject
4 yet, they don't have basal wells.

5 MS. KRAFTSOW: The wells are not getting
6 more salty. What's happening is the
7 reservoir is getting more salty because the
8 water levels are dropping in the brackish
9 wells and so they have to use wells that are
10 saltier already...

11 MEMBER GERBIG: Oh, so they're using, they
12 using more...

13 MS. KRAFTSOW: So the mix...

14 MEMBER GERBIG: Brackish water.

15 MS. KRAFTSOW: The mix of wells is getting
16 more salty.

17 MEMBER GERBIG: Ok.

18 MS. KRAFTSOW: Not the, not the wells
19 themselves.

20 DIRECTOR ENG: Right, 'cause their wells
21 are mostly, are all...

22 MS. KRAFTSOW: All.

23 DIRECTOR ENG: High level confined. Very
24 unique, very unique. Y'know they don't have

1 basal wells. Do they have any basal wells...?

2 MS. KRAFTSOW: They don't have basal wells
3 but they do have brackish high level ones...

4 DIRECTOR ENG: They have chlorides in there
5 that they have to really watch. So it's
6 very unique. That's what makes it, makes it
7 so different.

8 CHAIR HOWDEN: Ellen, what does all this
9 mean to the health of the sole aquifer on
10 the island then?

11 MS. KRAFTSOW: Well, that's what we've been
12 discussing, is this whole aquifer on the
13 island. I mean the water levels, the most,
14 the most dramatic drop is in the basal
15 aquifer; is in the, sorry, brackish aquifer.
16 That's why the, the water that they're
17 serving down at Manele is getting saltier.
18 Again, not because the wells are salting up
19 but because they have to use wells that
20 before they let sit because they were too
21 salty now they're more comparable and so
22 they're relying more on those wells. But
23 they are in the middle of a project to
24 distribute, they have a Well 15 that they're

1 drilling and if that pans out they'll be
2 able to distribute their withdrawals and
3 that should hopefully slow down the dropping
4 water levels. They're concerned about it
5 too 'cause it makes their pumpage more
6 expensive and also they've only built a very
7 small fraction of their Manele Project
8 District and they already running out of
9 brackish water, so.

10 MR. KUSHI: Mr. Chair, couple questions.

11 CHAIR HOWDEN: Please.

12 MR. KUSHI: Ellen, y'know that, you
13 referenced the redundancy standards, the
14 DWS's 2/3 of 2/3.

15 MS. KRAFTSOW: Yeah.

16 MR. KUSHI: So does it, it doesn't apply to
17 this system, right?

18 MS. KRAFTSOW: Well, they're statewide
19 standards so for planning purposes I think
20 that they do for the potable wells, apply
21 them but not for the brackish wells.

22 MR. KUSHI: Ok, but they're PUC regulated,
23 right?

24 MS. KRAFTSOW: Right.

- 1 MR. KUSHI: So, it's the PUC saying that
2 they, they have to apply these standards?
- 3 MS. KRAFTSOW: No, but I think that John
4 is, I mean he's talking, he was even going
5 so far as to say he didn't even want to try
6 to take more than 300,000 from one well. So
7 I don't think that, I think that pretty much
8 everybody wants to plan for that, whether or
9 not they actually need it.
- 10 MR. KUSHI: Who's enforcing it?
- 11 MS. KRAFTSOW: Nobody.
- 12 MR. KUSHI: Enforcing it?
- 13 MS. KRAFTSOW: Nobody would enforce it.
- 14 MR. KUSHI: And then the PUC, they are PUC
15 regulated?
- 16 MS. KRAFTSOW: They are PUC regulated.
- 17 MR. KUSHI: And you said their rates are
18 not self-sustaining.
- 19 MS. KRAFTSOW: The rates are not self-
20 sustaining, yeah.
- 21 MR. KUSHI: So the parent company, Murdoch
22 or whoever...
- 23 MS. KRAFTSOW: Right, and the parent
24 company has managed to maintain an arms

1 length relationship so...

2 MR. KUSHI: Sounds like Molokai.

3 MS. KRAFTSOW: Lana'i Holdings sells water
4 to Lana'i Water Company and then Lana'i
5 Water Company sells water and is a regulated
6 utility.

7 MR. KUSHI: So are they going in for a rate
8 increase?

9 MS. KRAFTSOW: They are. They have already
10 gotten one for their brackish but it's, it's
11 a little bit different than my design but
12 it's similar idea. But they are going in
13 for a potable rate increase very soon.

14 MR. KUSHI: Your reference designation, I
15 mean what's the feeling of the community?
16 Why not have the state designate it?

17 MS. KRAFTSOW: I think because the feeling
18 of the community frankly, is that we pay
19 more attention to them than the state does.
20 And that it's always better to have 2
21 agencies because of checks and balances. So
22 like for instance, if you have just, if you
23 designate it, I mean it's already kind of
24 iffy with us, it's, we don't have any meters

1 and it's a pain in the butt frankly to deal
2 with Lana'i, so we don't spend the kind of
3 attention on them maybe that we should but
4 maybe it also interferes with our other
5 attention but at least we pay some attention
6 and if the, if Lana'i were to be designated
7 and you had a really, really, y'know, Joe
8 Pro regulator state governor and everything,
9 you could end up with protections and maybe
10 even protection beyond what you need. But
11 the county might say hey, look we need to
12 worry about our economy. Similarly if you
13 have a really, y'know, get-rid-of-all-
14 regulations governor but you have a county
15 that's more concerned about it's local..

16 MR. KUSHI: See, I, I, I can see this..

17 MS. KRAFTSOW: Stat, y'know what I mean,
18 it's just a check and balance thing.

19 MR. KUSHI: You've done a great job and I
20 think what you've done is like a rate case
21 for them. But, and it's way over and above
22 what you did for Central.

23 MS. KRAFTSOW: No, no, nah.

24 MR. KUSHI: I mean you didn't have all

1 these figures for Central Maui.

2 MS. KRAFTSOW: You haven't seen everything
3 that he's doing for Central. I mean Carl's
4 been doing such a...

5 MR. KUSHI: Anyway, that's my opinion. But
6 I'm looking at the fact that when this thing
7 comes through us and it goes to the council,
8 what are those guys gonna look at? Why are
9 we even dealing with this?

10 VICE CHAIR ROBINSON: Yeah, that's a
11 question.

12 MR. KUSHI: Because we have no systems
13 there.

14 MS. KRAFTSOW: Yeah, because the county is
15 the political subdivision of the state.

16 MR. KUSHI: Right.

17 MS. KRAFTSOW: And as the political
18 subdivision of the state the county has the
19 obligation and the responsibility and the
20 authority to protect water resources. It's
21 in Article 11 of the constitution and now
22 the state has primacy but the county still
23 has responsibility.

24 MR. KUSHI: So if a private enterprise like

1 Castle and Cooke wants to drill a well not
2 in accordance with your plan so you're
3 saying that the county can come in and stop
4 'em?

5 MS. KRAFTSOW: No, I think what would
6 happen is the, it would be more, I don't
7 think that we would tell them what to drill
8 or not, I think that by working with the
9 community hopefully we'd be on the same
10 page. If we're not on the same page and
11 that happens then I think it would be a
12 recommendation to the state to designate and
13 or a recommendation to the Planning
14 Commission not to approve certain project
15 rules.

16 MR. KUSHI: I'm just gonna play devil's
17 advocate...

18 MS. KRAFTSOW: I mean, I'll tell you that
19 I've seen my boss have to plan, have to
20 approve available source and they send him
21 documents that are their documents but I,
22 but the situation has changed since those
23 documents and nobody tells him. And I don't
24 catch 'til y'know what I mean, so you kinda

1 need to have, that's why we wanted to make
2 it really easy and really easy
3 implementation.
4 DIRECTOR ENG: It was easy, wasn't it? Ha
5 ha ha.
6 MS. KRAFTSOW: Sorry, it was a long..
7 DIRECTOR ENG: There is a lot of data,
8 especially when it comes down to cost
9 details of the operations. I, I didn't
10 expect that much in the plan y'know, I mean
11 that's, that's really their kuleana, Lana'i
12 Water Company's.
13 MS. KRAFTSOW: Sorry.
14 DIRECTOR ENG: Ours would be health and
15 plan future source development to meet the
16 growth projections of the island. But that
17 amount of detail, they're very fortunate.
18 They should paid your salary.
19 VICE CHAIR ROBINSON: I was gonna say they
20 should..
21 DIRECTOR ENG: No, no, they should pay and
22 reimburse the county.
23 VICE CHAIR ROBINSON: Yeah, I mean that's,
24 that's a...

1 DIRECTOR ENG: I mean you work here and a...
2 (several people speaking at the same time)
3 VICE CHAIR ROBINSON: That's a high power,
4 high powered consultant fee.
5 MEMBER GERBIG: Bill 'em tomorrow.
6 DIRECTOR ENG: No, but really, it is, it is
7 something that's highly, so benefits a,
8 really, a private company and I'm kind of...
9 MEMBER GERBIG: Freebie consulting, yeah.
10 MS. KRAFTSOW: Well, I don't know because
11 maybe they don't want to hear it, what I had
12 to say either.
13 MR. KUSHI: Well, I, I'm just concerned
14 what the council would...
15 (Mr. Kushi, Member Gerbig and Director Eng
16 speaking at the same time)
17 MEMBER GERBIG: No, but that's a lot of
18 valuable data...
19 MR. KUSHI: About the...
20 MEMBER GERBIG: That you got there...
21 DIRECTOR ENG: Yeah, we're gonna, yeah,
22 they're gonna...
23 MEMBER GERBIG: Can't, can't be ignored.
24 DIRECTOR ENG: Especially if they don't

1 approve it.

2 MS. KRAFTSOW: I think it, I think it kinda
3 felt like I had to do a little overkill just
4 because I don't, I don't really make any
5 secret of the fact that I'm, of my
6 environmental leanings and I wanted to be
7 sure that the data spoke for itself and not
8 just me.

9 MEMBER GERBIG: Yeah, you did a nice job
10 there.

11 MEMBER YAMAMURA: That's the only
12 comprehensive water study done on Lana'i.

13 VICE CHAIR ROBINSON: Yeah, I'll say.

14 MEMBER GERBIG: That's ever been done,
15 yeah. Anything ever been done like this
16 before over there?

17 MS. KRAFTSOW: I think that this is just
18 pulls together, there's a lot of work out
19 there, it just y'know nobody had it all in
20 one place before. I'll never have to do it
21 again, even if I had to do another plan
22 Lana'i I'd never help to do, y'know..

23 CHAIR HOWDEN: And now we have 800 pages of
24 it.

- 1 VICE CHAIR ROBINSON: Right.
- 2 CHAIR HOWDEN: Get to work, guys.
- 3 VICE CHAIR ROBINSON: And we don't have to
4 digest it all because she synopsized it so
5 we...
- 6 DIRECTOR ENG: No, you have to. Ha ha ha.
- 7 VICE CHAIR ROBINSON: We do? Oh, sorry.
- 8 MEMBER GERBIG: But what, as far as our
9 responsibility, the Board of Water Supply,
10 what are we supposed to do now? We got this
11 report. We're supposed to have hearings for
12 whatever reason?
- 13 CHAIR HOWDEN: We, we go to Lana'i.
- 14 VICE CHAIR ROBINSON: We get over to
15 Lana'i.
- 16 CHAIR HOWDEN: At least 5 of us.
- 17 MEMBER GERBIG: Why?
- 18 CHAIR HOWDEN: We have to do public
19 hearings.
- 20 VICE CHAIR ROBINSON: Still have to, have
21 to have a public hearing.
- 22 CHAIR HOWDEN: Have to do public hearing.
- 23 MEMBER GERBIG: By law?
- 24 MS. KRAFTSOW: Yeah.

1 MEMBER GERBIG: Someplace?

2 MS. KRAFTSOW: It has to be written with
3 the, well the guidance, the framework is
4 really guidance not law. And the framework
5 says that it has to be written with a
6 credible and robust public process but the,
7 I think the code also says that a public
8 process is required.

9 MEMBER GERBIG: So that drags this whole
10 thing...

11 MS. KRAFTSOW: The state water code and the
12 county code both actually.

13 VICE CHAIR ROBINSON: How, in your
14 experience, how active are, is the community
15 there in showing up for things that have
16 water?

17 MS. KRAFTSOW: Some of them are quite
18 active and others, I mean, I've had the
19 experience of being on the straight with
20 the, y'know, well, with both sides actually,
21 with John and with Ron, who are the main,
22 y'know, the company and the LSG people. And
23 in both cases I've seen people from the
24 community come up and say y'know, oh, we're

1 so grateful for what he's doing and y'know,
2 more so honestly with the opponents. I've
3 just seen people come and I, and I spend
4 just as much time with either one of them.

5 VICE CHAIR ROBINSON: Can I suggest a press
6 release go the Lana'i Times when we are
7 gonna go over there and that way it's not
8 just the 5 of us and a few of the, few, few
9 people from the community but that it
10 becomes somewhat worth our while to be
11 there. Y'know the editor over there?

12 MS. KRAFTSOW: Yeah, I have it.

13 CHAIR HOWDEN: And, and logistically we may
14 need to do perhaps an afternoon hearing and
15 an early evening hearing and I don't know
16 how it is logistically in terms of getting
17 there and getting back. I think the ferry's
18 a great way to go.

19 VICE CHAIR ROBINSON: I think the last, the
20 last ferry goes back at 6:30.

21 CHAIR HOWDEN: Yeah, I mean it, it seems
22 unreasonable to expect that in a community
23 like that where people are at work that,
24 that they would be able to take time off to

1 come, I don't know.

2 MEMBER GERBIG: Or maybe have it at a, have
3 it on a Saturday.

4 MS. KRAFTSOW: I think that the other thing
5 is that a lot people if they're not directly
6 beholding to the company then their
7 relatives are.

8 VICE CHAIR ROBINSON: Right.

9 MS. KRAFTSOW: And so I think that, I'm
10 sorry...

11 (laughter)

12 (several people speaking over Ms. Kraftsow)

13 MS. KRAFTSOW: My very first day of work
14 here I had to go to Lana'i and I've watched
15 this for years there is some fear.

16 MS. KRAFTSOW: It's a one shop town y'know.

17 VICE CHAIR ROBINSON: Yeah, I've done a
18 fair amount of meetings and things around
19 Lana'i.

20 MS. KRAFTSOW: I probably shouldn't say
21 these things.

22 CHAIR HOWDEN: Ok, well let's leave it
23 there for now.

24 MR. KUSHI: So we're looking at, Gaye, we

1 make like in August?

2 VICE CHAIR ROBINSON: August.

3 MR. KUSHI: If we get it next month? We
4 got 180 days from..

5 VICE CHAIR ROBINSON: So sometime in August
6 we may be going over there for public?

7 MR. KUSHI: August or September.

8 MS. KRAFTSOW: Well, if you get it June you
9 could, you could do it in July and get it
10 over with, be done.

11 CHAIR HOWDEN: But we have to read the
12 document first, Ellen.

13 MS. KRAFTSOW: Nah.

14 (laughter)

15 CHAIR HOWDEN: This manini thing you handed
16 us, yeah?

17 MS. KRAFTSOW: I'll write an executive
18 summary that's like 20 pages and you
19 probably know what it says.

20 VICE CHAIR ROBINSON: That's what we're
21 talking, now we're talking. Thank you.

22 CHAIR HOWDEN: Ok.

23 MS. KRAFTSOW: That's one of my big edits
24 actually is to take the front of every

1 chapter and write "Key Points" so that like
2 this 70 page chapter you can read 'em in 5
3 pages.

4 VICE CHAIR ROBINSON: Do you, do you
5 include in that report what the hotels are
6 using for their irrigation system?

7 MS. KRAFTSOW: I do.

8 VICE CHAIR ROBINSON: Ok, so is it like the
9 Four Seasons, they have the ET, that has
10 ground sensor...

11 MS. KRAFTSOW: They have weather stations.
12 I'm not, I haven't actually been much in
13 contact with the hotel. It's a separate
14 company now but John's very excited about, I
15 guess their new conservation manager, but
16 the meter, there's some hotel irrigation
17 that's identified and of course the golf
18 course is identified but it's very small.
19 The most part in the billing data that they
20 gave me it was combined and I had to
21 separate it by looking at things like the
22 seasonal trends.

23 CHAIR HOWDEN: Ok, we'll get to this, get
24 more deeply into the documents. Thanks,

1 Ellen.

2 VICE CHAIR ROBINSON: Thank you.

3 DIRECTOR ENG: Thanks, Ellen.

4 CHAIR HOWDEN: Do the members have a,
5 agenda items for next time?

6 VICE CHAIR ROBINSON: Well there was one
7 that you made note of.

8 MS. HAYASHIDA: The sub-committee.

9 VICE CHAIR ROBINSON: Ok.

10 CHAIR HOWDEN: The sub-committee, yeah, for
11 appeals. Anything else?

12 MR. KUSHI: Gaye, you would have the
13 hearings officer list?

14 MS. HAYASHIDA: Yeah. I, in fact I
15 forwarded a copy to Jeff and I think I put
16 one in the mail to you.

17 CHAIR HOWDEN: Ok. And...

18 VICE CHAIR ROBINSON: Is there, is there
19 any reason for, for us to just like we did
20 with Na Wai Eha, is to get some kind of
21 update on the, on the whole stream hearing
22 piece and the department's position and all
23 of that?

24 MS. HAYASHIDA: For the next meeting? On

1 the contested case for East Maui?

2 DIRECTOR ENG: I can give you, even, even
3 today I have an opportunity, I can do that.

4 VICE CHAIR ROBINSON: You can do that in
5 your report? Ok.

6 CHAIR HOWDEN: Jeff, these are all his
7 notes.

8 DIRECTOR ENG: I'm still analyzing it. It
9 is so, well, when we get to that.

10 CHAIR HOWDEN: Ok, we'll, we'll be there in
11 moments.

12 MS. HAYASHIDA: So no need to put that on
13 the next agenda then?

14 CHAIR HOWDEN: Ok.

15 DIRECTOR ENG: It's amazing. Hang around,
16 Ellen. It's amazing. I've, I've, I've,
17 I've slept with this report the past 8 days.
18 Still don't understand it. That's just
19 kinda like my wife too y'know.

20 (laughter)

21 CHAIR HOWDEN: Huge, huge notes, yeah. And
22 I still have some questions on the Waikamoi
23 Flume system on the specs on that but we can
24 bring that up next meeting.

1 VICE CHAIR ROBINSON: Ok.

2 CHAIR HOWDEN: Ok, no communications. And
3 now we are to the Director's Report. Ok.
4 Go Jeff.

5 DIRECTOR ENG: Ok, first let me touch on
6 Kamole improvements. You wanna do that
7 first?

8 CHAIR HOWDEN: Yes, please.

9 DIRECTOR ENG: Ok. I guess you're
10 concerned or, or would like to see if we
11 could get more production and therefore
12 issue some meters. As far as any
13 limitations on the intake into the facility,
14 we do have a limitation when the Wailoa
15 Ditch or the forebay is low.

16 CHAIR HOWDEN: Yes.

17 DIRECTOR ENG: Low flow is a big concern
18 and I don't know why it hadn't been, hasn't
19 been addressed earlier. But generally like
20 when it drops down let's say from the 10 to
21 20 million gallons per day level, there are
22 some hydraulic issues. Now, right now we do
23 have another by-pass line that we can bring
24 in water to the plant. So that's something

1 that we need to look into. And that's
2 something that I would like to probably put
3 in to our next CIP program. All these
4 little things that people are, we find them.
5 We find some things that need to be improved
6 due to other, all these other priorities
7 they somehow get overlooked. That won't
8 issue more meters, that'll just allow us to
9 at very low levels be more efficient in
10 operations and they can absolutely use as
11 much water from that ditch when it's low.
12 As far when there's adequate levels in the
13 ditch, it's working at capacity basically.
14 There's other things that we deal with water
15 quality and just operations of those filters
16 that you're required to be back flush,
17 periodically cleaned from various types of
18 chemicals to remove the residues but it's
19 operation, operating pretty efficiently like
20 it is. Only during low flow periods we
21 gotta do the improvements. That probably
22 require some kind of probably additional
23 pumping into the plant I would imagine.
24 CHAIR HOWDEN: But given that the

1 Memorandum of Understanding gives the county
2 the right to take up to 16 million gallons a
3 day from the Wailoa Ditch, would it not make
4 sense if, if Kamole Weir as a treatment
5 plant can only handle let's say 8 to 10
6 million gallons a day, that we look at
7 instead of drilling more wells, which are
8 certainly iffy, we look at a duplicate plan
9 to, y'know something, another treatment
10 plant or expanding Kamole Weir so that we
11 could have the capacity to draw what we've
12 already agreed upon?

13 DIRECTOR ENG: Yeah, well, I, I think the
14 way we would ever be able to, on a regular
15 basis, be able to produce more from Kamole
16 is to have a reservoir there. Y'know that
17 would be the only opportunity and again when
18 we're, we're dealing with other issues and
19 the induction of, or the restoration of
20 stream flows y'know it is, we're, we're
21 combating that too, y'know like Carl has
22 done an additional study that we may need
23 additional storage just to maintain the
24 level of production we currently have. As

1 down the road the Water Commission takes
2 more action in restoring those streams in
3 East Maui and therefore lessening the
4 ditches. So, but if we can, again and they
5 made that decision the other day to allow
6 more restoration but so it's a number of
7 things but yeah, it was last year sometime I
8 gathered the troops together again, our
9 engineers basically to look at, is a storage
10 at that location, would that make sense.
11 Big cost item again. It's, it has its pros
12 and cons as far as construction,
13 constructing a reservoir there versus at the
14 Lower Kula site. There's fewer
15 environmental concerns, acquisition could be
16 an issue because Maui Pine has sold off a
17 lot of the surrounding lands, now you're
18 dealing with other owners. Like anything
19 there's just so many things and obstacles
20 but it's something to look at is that would
21 allow us, given no further stream
22 restoration in East Maui, a way of getting
23 more capacity production out of Kamole, so.
24 And therefore, my y'know, (inaudible).

1 CHAIR HOWDEN: Is there any movement
2 around, and Ed, forgive if I'm, I've been
3 asking y'know, is not appropriate but of any
4 movement on the Zach Franks Well?

5 DIRECTOR ENG: We haven't had any meetings
6 with Zach.

7 VICE CHAIR ROBINSON: He's been away.

8 DIRECTOR ENG: That's why. Ha ha ha. No,
9 I, no we haven't. He had sent a letter to
10 the mayor and, and I, I think we, a response
11 was recently been sent, not directly to him,
12 but I believe he's copied. And 'cause
13 they're dealing with the Department of
14 Housing and Human Concerns on a project that
15 would benefit from this, his well, so, those
16 things and so it's not a really a direct
17 communication...

18 CHAIR HOWDEN: Ok.

19 DIRECTOR ENG: Between the department and
20 him.

21 MR. KUSHI: We're willing and waiting for
22 him to call.

23 CHAIR HOWDEN: Ok.

24 MR. KUSHI: And sit, we'll sit down with

1 him.

2 CHAIR HOWDEN: Great, yeah, yeah, that's
3 good.

4 DIRECTOR ENG: Great, we're talking. We've
5 always have been.

6 MR. KUSHI: We haven't crunched the numbers
7 at all yet.

8 CHAIR HOWDEN: So, would we be able to
9 work, I mean, I saw that you're interface
10 with Laura Thielen and she was going like on
11 the Waikamoi Flume system, y'know we want
12 something that is gonna last y'know.

13 DIRECTOR ENG: And I think we will be doing
14 something.

15 CHAIR HOWDEN: So that the specs on the
16 plans are what? For y'know, the, the
17 consultant...

18 DIRECTOR ENG: Well, right now the stage we
19 are with the Waikamoi Flume project is we're
20 just, we have a proposal from the, we
21 selected a consultant. He went up with our
22 engineers back I think on March 8th to
23 inspect the site. And it was great because
24 it was storming up there that day so they

1 saw the full opportunity to capture water
2 and in recent weeks we've basically been
3 negotiating with the consultant. Actually
4 kinda bring down his price a little bit.
5 Just kinda stay within our budget. It's
6 been ongoing for a couple of negotiations
7 and I think it's probably real close to
8 being finalized and signed off on. Then he,
9 then he'll design it and handle all the
10 various environmental improvement
11 initiatives too that go along with that.
12 And I, y'know I've probably I would say it's
13 about a 12-month time frame to complete that
14 that design. And we've already included
15 some projected costs into our proposed
16 fiscal year 2012 budget. So, first I kinda
17 like the notion that the commission, the
18 Water Commission has presented the other day
19 is to give us 3 years to be in construction.
20 I like that. That's almost kinda like an
21 EPA consent decree. If you don't do it,
22 county, they're gonna cut your allocation of
23 water. So, that'll hold a gun to the, to
24 the council yet too. 'Cause I don't know

1 where I'm gonna be in 3 years so at least
2 I'd like to see this thing really happen.
3 So it's wonderful. So I think when Laura
4 threw that I, I just responded immediately,
5 yes, commit. I got a little kick under
6 table, no, no, I'm kidding. Ha ha ha.
7 (laughter)

8 DIRECTOR ENG: But it's something I, we
9 need to see. I think we all agree on that.
10 It's a good opportunity to, yeah, to
11 basically to, to mitigate these water losses
12 that we know are occurring. So it's great.

13 CHAIR HOWDEN: Jeff, do you feel that there
14 might be a mid-way ground with the Water
15 Commission in terms of the Waikamoi Stream
16 where we can pull from the flume, from a
17 flume system and then also the Piiholo but
18 then let the stream move makai of there?
19 Y'know some kind of give and take..

20 DIRECTOR ENG: Well, ok, so you were, ok,
21 well, maybe we could just talk about the
22 whole thing the other night to everyone.
23 Basically, the commission came in prepared
24 to make a decision on the IIFS's, that is

1 the Interim In-stream Flow Standards, for
2 these remaining 19 streams in the East Maui
3 watershed. A year and half ago or September
4 2008, they made a ruling on 8 streams and at
5 that time they, their decision was to
6 establish interim in-stream flow standards
7 totaling 12.21 million gallons per day for
8 these 8 streams. And that really
9 accommodated most of those taro growers in
10 the Keanae-Wailuanui area. So there are 19
11 remaining streams for them to, to rule.
12 Back in December, they were prepared to make
13 a decision. Their, the commission staff in
14 their recommendations proposed for one of
15 the streams, Makapipi, to establish an IIFS
16 and for the 18 remaining streams, just keep
17 it status quo. Well, the commission did not
18 agree to that. So, since December until
19 just as of, when was the last time I
20 submitted additional information, maybe a
21 week and half ago, there are constant
22 requests for more information from the
23 various parties and we're one of them. So
24 we've been pretty busy and we've had a few

1 meetings just the various parties and
2 commission staff. We never meet with the
3 commissioners themselves. That, that, that,
4 and so kinda came down to Tuesday, so they,
5 the staff only came out with their
6 recommendations last week Wednesday
7 afternoon and then it was really a cram
8 course to understand that 64 page document.
9 And that's what I did. From Wednesday
10 afternoon through Sunday I read that thing 5
11 times and every time I read it I got
12 something more. Came in Monday to work, I
13 revised it and then I had to prepare a
14 presentation so, understand it thoroughly
15 enough and prepare a presentation and then
16 be able to discuss it with, when Monday
17 afternoon I think we all met with the mayor
18 and I was pretty much there. But even
19 Tuesday morning, the day of the meeting, and
20 well, Monday night and Tuesday morning I
21 revised it again. Golly, Ellen, I'm kinda,
22 I don't know if it's contagious or what.
23 But yeah, it was, so, y'know my presentation
24 was what it was. Y'know, it kinda really

1 deviated from what I first thought I would
2 give. Y'know my first pass was, seemed like
3 pretty favorable, their recommendation from
4 staff. I think most people's impression
5 when they first read it, yeah, it's not that
6 hard for the county, but toward the end I
7 realized it was. I, I, had to make, make
8 recommendations I really wasn't fully
9 supportive of the staff. And they worked
10 really hard on it and did a real good job
11 but one thing I didn't want any further
12 releases from the Waikamoi Stream since it
13 is so important to our system 'cause we take
14 at the Waikamoi Flume; we take at the Lower
15 Kula pipeline and also it's diverted to
16 Wailoa Ditch.

17 CHAIR HOWDEN: Do, do we need the water
18 that goes into the Wailoa Ditch? Or, or...

19 DIRECTOR ENG: Yeah, that, that's, that's
20 Kamole.

21 CHAIR HOWDEN: Is that, is that, I mean
22 because so much other water goes into the
23 Wailoa Ditch, I was just wondering if, if it
24 might be strategic to give back...

1 DIRECTOR ENG: No, no, that's an important
2 stream at all levels of elevation.
3 CHAIR HOWDEN: Ok.
4 DIRECTOR ENG: It's real key; because
5 Wailoa Ditch, remember, in July of 2000,
6 well, you don't remember, but in July of
7 2008 that level went down to 11 million
8 gallons per day total. So we're, luckily
9 EMI and HC&S allowed us to take whatever we
10 could treat for domestic and ag irrigation
11 purposes but y'know Wailoa Ditch is real
12 critical, everything is real critical. But,
13 the other thing came out that staff
14 recommendation was recommendation to
15 establish an IIF, IIFS on a annual basis. I
16 mean one number to be complied with
17 throughout the year or a seasonal IIFS so
18 that's 6 months of wet weather you have a
19 higher IIFS, you release more water and
20 during the dry months a lower IIFS so the
21 off streams parts can have water. So I had
22 recommended a seasonal IIFS because that's
23 our demand. Our demands are seasonal. And
24 then the other issue was from around

1 November, December last year, all of a
2 sudden the Division of Aquatic Resource
3 (DAR) got involved. And their big thing was
4 the amount of habitat restoration. And that
5 was really kinda new. That's a new twist
6 on, for everyone; also for the Native
7 Hawaiian Legal Corporation. All of us were
8 quite confused but, and they wanted the
9 highest habitat restoration y'know year
10 round. But in my meetings with them in
11 kinda reviewing their reports and it was
12 just last weekend I, I, I realized y'know
13 there was just not sufficient data to
14 support their position. So on Tuesday
15 evening I, I supported initially a minimal,
16 I mean we support habitat restoration but at
17 a minimal level until data can prove
18 otherwise, and so that was basically our,
19 the county's position that evening. And in
20 the course of their deliberation, we weren't
21 privy to all the numbers the commissioners
22 had before them. That last final, were you
23 there 'til the very end?

24 CHAIR HOWDEN: No.

1 DIRECTOR ENG: Oh, man, the last 20 or 30
2 minutes I did not really understand what
3 they were talking about to tell you the
4 truth. I didn't know where they were going.
5 And, 'cause they had another set of data
6 before them that, so they made a ruling and
7 even when it was immediately decided I tried
8 to get up and I got the data from them,
9 didn't really know what it meant. And
10 actually that evening it was late, I went
11 home to try and look at their numbers and
12 yesterday morning I spent quite a few hours
13 analyzing, I know I'm a nerd but I went back
14 and tried to figure how those numbers were
15 derived by both CWRM staff and the Division
16 of Aquatic Resources (DAR) and, and after a
17 few hours I was able to kinda figure out
18 their recommendations. And so at least I
19 was a little bit satisfied until, until even
20 this morning when I read the Maui News and
21 what they reported. And, and their, and
22 then even before this meeting I called the
23 Water Commission, talked to one of the staff
24 members just to kinda get some verification

1 of how I calculated yesterday was correct.
2 And, and the person I spoke to said yeah but
3 she even threw out some other twists to me
4 that some errors that DAR had, that some
5 current concerns she had, but the Maui News
6 reported some erroneous information is, is
7 normal.

8 (laughter)

9 DIRECTOR ENG: But a lot of it is, the
10 confusion is what they discussed Tuesday
11 night was how much additional water is to be
12 restored. Not the IIFS's, y'know, how much
13 additional water. So when I was feeling
14 around early, I'm sorry, at the meeting..

15 CHAIR HOWDEN: Yeah, no, I saw you doing
16 that.

17 DIRECTOR ENG: But what I, so, so the
18 newspaper report 9.26 million gallons per
19 day total restoration, ok. Now that's not
20 the IIFS and I was trying to, trying to do
21 calculation and when I talked to the
22 commission staff today, I said but we gotta
23 figure out what the IIFS is. That's not
24 been published. She said, and they were

1 meeting this morning, so I believe the IIFS,
2 again, there's 2 IIFS's; a wet weather and a
3 dry weather. So what we're hearing in the
4 paper is a wet weather and it's, it's, again
5 it's the not restored, is 9.26 during the
6 wet months, 1.11 in the dry months. That's
7 the amount of water restored in the streams.
8 I'm thinking the IIFS is though is gonna be
9 like 10.29, 4.17, ok, so. But the Maui News
10 even confused it more today, ok, so they
11 added the not restored during the wet
12 months, 9.26. They referred to the
13 September 2008 IIFS's, again that's not what
14 was restored. That was IIFS's of the
15 previous 8 streams, the 12.21, then they
16 added again the dry months restoration, a
17 double dipping at 1.11 and they also, the
18 pending Na Wai Eha, they're saying they may
19 lose 34.5 million gallons, so they're saying
20 that potentially HC&S is gonna lose 57
21 million gallons in today's. Actually, to
22 date they've only lost 13.7 million gallons
23 so. Y'know it's a, and I had that figured
24 out for myself because everything, but the

1 commission is still working on this today.
2 They'll probably publish the official IIFS's
3 from Tuesday's decision. I mean I just
4 coming pretty close to that. But it's
5 really been confusing. And I think once
6 they do publish that then they'll be meeting
7 with the parties. I think I have a much
8 better understanding, its...

9 MS. KRAFTSOW: Jeff, then aside from our
10 flume redesign and the pipe or whatever it's
11 gonna be, it seems like we're gonna have to
12 redesign the intakes, yeah, to take variable
13 withdrawals based on flows?

14 DIRECTOR ENG: Well, there's something and
15 I have to, I guess when the decision is, is
16 written and, I guess that's what they'll do.
17 JR? Just by our, I don't know.

18 MR. KUSHI: They're talking about gauges
19 and meter readings.

20 DIRECTOR ENG: Yeah, but that evening Ken
21 Kawahara told me that right now that they're
22 saying we don't have to adjust our
23 diversions.

24 MS. KRAFTSOW: Not yet.

1 DIRECTOR ENG: The Waikamoi or the lower
2 pipeline. Problem is though is that they
3 did establish an IIFS for Waikamoi even
4 though I had requested a no, no further
5 y'know stream restoration. They did
6 recommend million gallons per day of
7 additional restoration but that's not IIFS.
8 Based on my, I did some calculations this
9 morning, sorry, there is really an I-I, yeah
10 it's 1.68 million gallons per day restored.
11 I think the IIFS is 2.71.

12 MEMBER GERBIG: Jeff, we're, we're going
13 beyond our 11 o'clock thing but all these
14 numbers aren't cast in concrete yet, are
15 they?

16 DIRECTOR ENG: They could.

17 MEMBER GERBIG: Yeah, they're all still
18 hanging in the air.

19 DIRECTOR ENG: Well, now that Native
20 Hawaiian Legal Corporation is requesting a
21 contested case hearing..

22 MEMBER GERBIG: Yeah, but...

23 DIRECTOR ENG: I don't, yeah, how, how
24 valid are these numbers of the other

1 evening. But the worst case scenario and it
2 just hit me Tuesday morning before the
3 meeting so I added something in my
4 presentation is that even though they're
5 saying we don't have to adjust our
6 diversions at the higher elevations, if they
7 can't meet that IIFS, if EMI shuts down all
8 their diversions they gotta get it
9 somewhere. They're gonna say you guys don't
10 take any water up there. That's why I took
11 the possession, ah position y'know, no
12 additional restoration. So yeah, we could
13 be impacted even though they say don't worry
14 about it up there, the higher elevations but
15 if you can't meet the IIFS, we're dropping
16 every drop we have, so that was, and I only
17 came to that realization Tuesday morning.

18 MR. KUSHI: We're in the dry season now and
19 then their proposed decision was no
20 restoration during the dry season.

21 DIRECTOR ENG: Yeah, no restoration but
22 based on my calculations there still is an
23 IIFS dry..

24 MR. KUSHI: Weather dry.

1 DIRECTOR ENG: A .84 mgd. So they're
2 thinking natural ground, spring water
3 whatever, but in reality it's zero in. Even
4 that evening on Tuesday, even with these dry
5 weather IIFS they may not even get any.
6 There might not be anything going down there
7 anyway so. But it's been really, still I
8 imagine I'm a bit confused. I, I gotta
9 kinda look at this a little bit more.

10 MS. KRAFTSOW: Did it, is it, was it on the
11 web or they emailed, or they mailed it to
12 you?

13 DIRECTOR ENG: The...?

14 MS. KRAFTSOW: The report.

15 CHAIR HOWDEN: This is telephone call.

16 DIRECTOR ENG: The, the, the, the, the
17 staff submittal? Go to, go to the
18 commission's website.

19 MS. KRAFTSOW: It's on the site?

20 DIRECTOR ENG: It was on the agenda, on the
21 agenda you can get their submittal, I mean
22 their staff submittal.

23 CHAIR HOWDEN: Well, I admire your
24 diligence.

1 DIRECTOR ENG: I'm a nerd, man.

2 CHAIR HOWDEN: In going..

3 DIRECTOR ENG: I'm a nerd, you love this
4 kind of thing.

5 CHAIR HOWDEN: No, no, you did, y'know this
6 is great. I mean we've never had a water
7 director who paid this much attention to..

8 DIRECTOR ENG: I'm a nerd.

9 CHAIR HOWDEN: This kind of stuff.

10 DIRECTOR ENG: No, so it is. Well, I had
11 it figured, y'know I was just so lost. You
12 do this when you're lost, to try find a way
13 out.

14 MEMBER GERBIG: I have a question off of
15 this. But on agenda items just thinking,
16 Jeff, since you, you think that we should
17 look at the conservation methods,
18 conservation parameters for drinking water
19 in the County of Maui? In other words, we
20 are under drought conditions more and more
21 and things like, should we maybe reevaluate
22 what our standards are for under drought
23 conditions for the council, maybe recommend
24 something to the..

1 DIRECTOR ENG: Yeah, we probably should
2 revisit that and y'know it's been years. I
3 know prior boards brought it up. It's, we
4 should have some room, look at those
5 guidelines again. It would be kinda, it
6 would be good for all of us, a good tool
7 for, yeah, we just haven't. A couple years
8 ago I think we tried and even internally,
9 yeah, so. Yeah, that would be great. Yeah,
10 so when we go public with a, some kind of...

11 MEMBER GERBIG: Put it on an agenda item,
12 maybe we could discuss what's in place and
13 probably...

14 DIRECTOR ENG: I'm all for that, yeah.

15 MEMBER GERBIG: Ok. I move, so move.

16 CHAIR HOWDEN: Ok, Gaye's got that? Ok.

17 MEMBER GERBIG: Review.

18 CHAIR HOWDEN: I mean one thing too, Don
19 and Jeff, is that historically at least
20 since Elmer Cravalho, our former mayor was a
21 member of this board, a chair of this board,
22 the board has exempted agricultural use from
23 drought restrictions.

24 MEMBER GERBIG: But we can get into that

1 when we review it.

2 (Chair Howden and Member Gerbig speaking at
3 the same time)

4 CHAIR HOWDEN: Ok, being there's a long,
5 long, long history of...

6 MEMBER GERBIG: I think that all that
7 should be brought out, all part of it.

8 CHAIR HOWDEN: All that stuff. So, and
9 we'll be, we'll be talking about that, yeah.

10 DIRECTOR ENG: Great, that gonna be
11 terrific.

12 CHAIR HOWDEN: Wow, thank you that was the
13 best director's report. I mean wow.

14 DIRECTOR ENG: No, I was just, I'm so...

15 CHAIR HOWDEN: That was good, thank you.
16 Thank you for your efforts. Ok, Division
17 Reports? We already had Ellen's. You have
18 the documents. The only thing that's left
19 for us to do is adjourn.

20 DIRECTOR ENG: Great.

21 CHAIR HOWDEN: Thank you, guys.

22

23

24 (The meeting recessed at 11:03 a.m.)

Prepared and submitted by:

Gaye Hayashida
Commission Support Clerk

Approved on: _____