1
00:00:04.870 --> 00:00:07.406
OK, good morning everyone.

2
00:00:07.406 --> 00:00:10.342
This is December 14, 2021.

3
00:00:10.342 --> 00:00:11.890
It's 9:02 AM.

4
00:00:11.890 --> 00:00:15.226
This is the continuation of the.

5
00:00:15.230 --> 00:00:18.490
Contested case proceeding on the

6
00:00:18.490 --> 00:00:21.750
East Maui Water revocable permits.

7
00:00:21.750 --> 00:00:26.270
2021 and 2022. Good morning.

8
00:00:26.270 --> 00:00:28.944
Could I ask the parties to please

9
00:00:28.944 --> 00:00:30.880
introduce yourselves for the record?

10
00:00:30.880 --> 00:00:32.861
And if everyone in the in the

11
00:00:32.861 --> 00:00:34.886
room would please turn on your

12
00:00:34.886 --> 00:00:36.366
video for their introductions,

13
00:00:36.370 --> 00:00:39.107
then you can turn it back off.

14
00:00:39.110 --> 00:00:41.654

Miss akai? Good morning,

15
00:00:41.654 --> 00:00:44.834
Trisha Kogi and David schulmeister.

16
00:00:44.840 --> 00:00:48.171
Appearing on behalf of A and B&MI with us.

17
00:00:48.171 --> 00:00:49.759
Today is Meredith Chingar,

18
00:00:49.760 --> 00:00:51.938
client representative and Nicole Yamane from

19
00:00:51.938 --> 00:00:54.738
our office who is helping with exhibits.

20
00:00:54.740 --> 00:00:56.162
OK, thank you and once again

21
00:00:56.162 --> 00:00:57.500
I forgot to introduce myself.

22
00:00:57.500 --> 00:01:00.146
For the record Suzanne Case hearing Officer

23
00:01:00.146 --> 00:01:03.339
for the Board of Land and Natural Resources.

24
00:01:03.340 --> 00:01:06.550
All right County of Maui.

25
00:01:06.550 --> 00:01:07.938
Good Morning Deputy corporation

26
00:01:07.938 --> 00:01:08.979
counsel Caleb Rowe,

27
00:01:08.980 --> 00:01:10.639
on behalf of the County of Maui,

28
00:01:10.640 --> 00:01:13.286
I do not have a client representative.

29
00:01:13.290 --> 00:01:15.750
OK, thank you, Sierra Club.

30
00:01:15.750 --> 00:01:17.826
Good morning David Frank with the

31
00:01:17.826 --> 00:01:19.575
Sierra Club and Wayne Tanaka's

32
00:01:19.575 --> 00:01:21.765
club is here with us today.

33
00:01:21.770 --> 00:01:25.748
OK, thank you and we have a witness and

34
00:01:25.748 --> 00:01:30.608
Anna represent her attorney representing him.

35
00:01:30.610 --> 00:01:32.428
Yes, thank you, uh yeah yeah.

36
00:01:32.430 --> 00:01:36.609
Benchen 4, Wilson Okamoto and Dalton Beaupre.

37
00:01:36.610 --> 00:01:39.148
OK, thank you and we have our court reporter.

38
00:01:39.150 --> 00:01:41.208
Can you just give us a wave?

39
00:01:41.210 --> 00:01:46.260
Bambusa court reporter. Thank you.

40
00:01:46.260 --> 00:01:48.853
OK, uh, I think that's it, uh,

41
00:01:48.853 --> 00:01:51.918

everybody have everybody they want.

42
00:01:51.920 --> 00:01:54.716
We have a public viewing room.

43
00:01:54.720 --> 00:01:56.757
In the bill in our boardroom here,

44
00:01:56.760 --> 00:02:03.005
no ones there, uhm? Today OK,

45
00:02:03.005 --> 00:02:07.445
so our witness lineup today is Mr Beaupre.

46
00:02:07.450 --> 00:02:09.322
Uhm, and then Mr.

47
00:02:09.322 --> 00:02:10.981
Tanaka? Is that correct?

48
00:02:10.981 --> 00:02:12.966
Witnesses for the Sierra Club?

49
00:02:12.970 --> 00:02:16.407
And then at 2:00 PM you have.

50
00:02:16.410 --> 00:02:17.646
Scheduled Mr Chung.

51
00:02:17.646 --> 00:02:20.530
Then you're going to tell us whether

52
00:02:20.610 --> 00:02:22.776
we're gonna do that later on.

53
00:02:22.776 --> 00:02:24.810
And we're going to have closing

54
00:02:24.881 --> 00:02:28.460
arguments tomorrow morning, correct?

55
00:02:28.460 --> 00:02:33.124
Alright, uh, I think we are ready then.

56
00:02:33.130 --> 00:02:34.116
Alright, Mr.

57
00:02:34.116 --> 00:02:36.088
Frankel, please go ahead.

58
00:02:36.090 --> 00:02:36.952
Oh sorry,

59
00:02:36.952 --> 00:02:37.814
Linda Shaw,

60
00:02:37.814 --> 00:02:41.390
would you please swear or witness in

61
00:02:41.390 --> 00:02:44.414
Mr Beaupre good morning Mr Beaupre.

62
00:02:44.414 --> 00:02:48.139
Do solemnly vishali swear to tell the truth,

63
00:02:48.140 --> 00:02:50.836
the whole truth and nothing but the truth?

64
00:02:50.840 --> 00:02:52.348
I do thank you.

65
00:02:55.930 --> 00:03:00.407
Mr Beaupre uh. Have you talked

66
00:03:00.407 --> 00:03:01.852
to anyone at Alexander and

67
00:03:01.852 --> 00:03:03.689
Baldwin in the last couple weeks?

68
00:03:06.200 --> 00:03:09.560

No, not recently OK.

69
00:03:09.560 --> 00:03:11.856
Uhm, can you please describe

70
00:03:11.856 --> 00:03:14.040
your role in the preparation of

71
00:03:14.111 --> 00:03:16.097
the EIS for the proposed water

72
00:03:16.097 --> 00:03:18.627
lease for the HIKOO can I put him

73
00:03:18.627 --> 00:03:20.331
in new and hula license area?

74
00:03:23.010 --> 00:03:26.041
Yeah, so I am a planner at

75
00:03:26.041 --> 00:03:28.409
Wilson Okamoto and I was the.

76
00:03:28.410 --> 00:03:30.328
I guess more so the grunt worker.

77
00:03:30.330 --> 00:03:33.129
Oh, I did the day-to-day writing for the EIS,

78
00:03:33.130 --> 00:03:34.936
in coordination with the sub consultants.

79
00:03:37.810 --> 00:03:42.360
Uhm? Can you just so did you help

80
00:03:42.360 --> 00:03:44.288
draft the contents of the IS?

81
00:03:46.510 --> 00:03:49.456
Yes, I wrote the entire yes,

82
00:03:49.460 --> 00:03:51.340
he wrote the entire thing.

83
00:03:51.340 --> 00:03:54.182
Yes, with the help of our technical

84
00:03:54.182 --> 00:03:56.641
consultants and you must have read

85
00:03:56.641 --> 00:03:58.957
it back and forth several times.

86
00:03:58.960 --> 00:04:02.378
Yes. Are the contents of

87
00:04:02.378 --> 00:04:03.888
the EIS true and accurate?

88
00:04:08.030 --> 00:04:08.620
Yes.

89
00:04:10.950 --> 00:04:14.789
And I want to ask you about the

90
00:04:14.789 --> 00:04:16.693
information in the environment impact

91
00:04:16.693 --> 00:04:18.963
statement regarding how many gallons

92
00:04:18.963 --> 00:04:21.937
per acre per day various crops need.

93
00:04:21.940 --> 00:04:23.818
Where did you obtain that information?

94
00:04:27.190 --> 00:04:30.100
Uhm, I'm assuming you're asking about

95
00:04:30.100 --> 00:04:33.185

the Mahi Pono farm plan. Yeah it would.

96
00:04:33.185 --> 00:04:35.509
It help if I brought up the EIS and the page.

97
00:04:35.510 --> 00:04:38.250
The page where it's referenced.

98
00:04:38.250 --> 00:04:41.320
Is it in chapter 2?

99
00:04:41.320 --> 00:04:44.080
Correct chapter two. OK, yeah,

100
00:04:44.080 --> 00:04:47.638
that information came from Mahi Pono

101
00:04:47.640 --> 00:04:51.175
and it was in collaboration with our

102
00:04:51.175 --> 00:04:52.690
agricultural technical consultant.

103
00:04:52.690 --> 00:04:55.697
Who was who? Mr Bruce plush.

104
00:04:55.697 --> 00:04:58.242
So I looked at his appendix and there's

105
00:04:58.242 --> 00:05:00.534
nothing in his appendix that Bruce

106
00:05:00.534 --> 00:05:03.049
Splash wrote that talks about the actual

107
00:05:03.049 --> 00:05:05.275
water needs for any crop per acre.

108
00:05:05.275 --> 00:05:06.925
So is that information he supplied

109
00:05:06.925 --> 00:05:09.105
to Orly or is this information that

110
00:05:09.105 --> 00:05:11.049
actually just came from Molly Pony?

111
00:05:16.150 --> 00:05:18.175
I believe it's information that

112
00:05:18.175 --> 00:05:20.200
they work together that was

113
00:05:20.268 --> 00:05:22.188
provided to us by Maki Ponu.

114
00:05:22.190 --> 00:05:24.115
But you didn't provide the

115
00:05:24.115 --> 00:05:25.655
foundation or background information

116
00:05:25.655 --> 00:05:27.308
about where these numbers were

117
00:05:27.308 --> 00:05:30.400
derived from in the EIS, did you?

118
00:05:30.400 --> 00:05:33.240
No, but it's based on a coefficient study.

119
00:05:33.240 --> 00:05:34.896
I do know that.

120
00:05:34.896 --> 00:05:37.380
Then who did this coefficient study?

121
00:05:37.380 --> 00:05:40.060
I do not know. Alright.

122
00:05:44.000 --> 00:05:46.412

I paged well, let me actually bring this up.

123
00:05:46.420 --> 00:05:47.878
I'm going to share a screen if I have.

124
00:05:47.880 --> 00:05:50.530
If I have been enabled already.

125
00:06:02.380 --> 00:06:05.201
So do you see the first page

126
00:06:05.201 --> 00:06:08.130
of your EIS down the screen?

127
00:06:08.130 --> 00:06:12.022
Yes, I can never tell what other people

128
00:06:12.022 --> 00:06:15.210
can see versus what I can see, so.

129
00:06:17.770 --> 00:06:20.862
If we go down to Page 3,

130
00:06:20.862 --> 00:06:23.454
dash 24 of the environment impact

131
00:06:23.454 --> 00:06:25.916
statement I've highlighted here, this ends.

132
00:06:25.916 --> 00:06:27.781
It is understood that approximately

133
00:06:27.781 --> 00:06:31.247
30% of the water in the license area.

134
00:06:31.250 --> 00:06:33.038
Streams is derived from.

135
00:06:33.038 --> 00:06:34.826
The privately owned lands.

136
00:06:34.830 --> 00:06:37.388
You see that. Yes,

137
00:06:37.388 --> 00:06:39.228
so use the passive voice.

138
00:06:39.230 --> 00:06:42.214
It is understood it is understood by whom.

139
00:06:44.550 --> 00:06:47.710
It's based on a the 1938 agreement,

140
00:06:47.710 --> 00:06:50.517
so I guess what I was trying to say

141
00:06:50.517 --> 00:06:53.549
it's understood between I guess now

142
00:06:53.549 --> 00:06:58.199
the state and EMI and AMB. So you see,

143
00:06:58.199 --> 00:07:01.050
it's it's understood by the state, UM?

144
00:07:07.390 --> 00:07:09.978
Uh, well, that's derived

145
00:07:09.978 --> 00:07:12.566
from privately owned land.

146
00:07:12.570 --> 00:07:14.442
What does that mean?

147
00:07:14.442 --> 00:07:16.782
Derived from privately owned lands?

148
00:07:16.790 --> 00:07:19.542
My understanding is the

149
00:07:19.542 --> 00:07:22.724

streams in the QCA watershed.

150
00:07:22.724 --> 00:07:26.066
The waters that originate from there

151
00:07:26.066 --> 00:07:29.570
and then flow through the license area.

152
00:07:29.570 --> 00:07:31.435
So that water that's derived

153
00:07:31.435 --> 00:07:32.927
there's privately owned lands,

154
00:07:32.930 --> 00:07:36.380
or the Hawaii Cuckoo watershed.

155
00:07:36.380 --> 00:07:38.172
So you're saying that?

156
00:07:38.172 --> 00:07:40.772
What are the derives from

157
00:07:40.772 --> 00:07:42.650
privately owned lands?

158
00:07:42.650 --> 00:07:46.256
Are different than water flow over

159
00:07:46.256 --> 00:07:49.969
and derived from publicly owned lands.

160
00:07:49.970 --> 00:07:52.698
Correct, and when you use the word derived,

161
00:07:52.700 --> 00:07:55.706
are you saying the diversion itself?

162
00:07:55.710 --> 00:07:58.056
He's on privately owned land or

163
00:07:58.056 --> 00:08:00.180
the water flows across privately

164
00:08:00.180 --> 00:08:02.605
owned lands before they are

165
00:08:02.605 --> 00:08:04.545
diverted from somewhere else.

166
00:08:04.550 --> 00:08:07.352
I'm trying to say the water

167
00:08:07.352 --> 00:08:09.970
originates on that privately annoyed.

168
00:08:09.970 --> 00:08:12.930
And you don't know if there's any legal

169
00:08:12.930 --> 00:08:15.161
basis for any distinction between

170
00:08:15.161 --> 00:08:17.975
water that flows over and derives

171
00:08:17.975 --> 00:08:22.016
from privately owned land versus other water,

172
00:08:22.016 --> 00:08:24.008
do you?

173
00:08:24.010 --> 00:08:25.998
I'm just going to extend that he's

174
00:08:25.998 --> 00:08:27.510
calling for legal conclusion.

175
00:08:29.790 --> 00:08:30.300
I'll join.

176
00:08:40.870 --> 00:08:42.555

Frankly, is there something else

177
00:08:42.555 --> 00:08:44.610
you're trying to get at here?

178
00:08:44.610 --> 00:08:46.990
I want an answer to my question.

179
00:08:46.990 --> 00:08:49.696
OK, would you repeat the question?

180
00:08:49.700 --> 00:08:52.220
I wish we had a court reported it.

181
00:08:52.220 --> 00:08:55.320
Read these questions back so.

182
00:08:55.320 --> 00:08:58.490
Uhm? Are you?

183
00:09:00.820 --> 00:09:03.977
Do you realize that there is no

184
00:09:03.977 --> 00:09:06.334
legal distinction between raw water

185
00:09:06.334 --> 00:09:08.629
that is derived from privately

186
00:09:08.629 --> 00:09:11.358
owned land versus any other water?

187
00:09:11.360 --> 00:09:12.720
Yeah I'm gonna agree then.

188
00:09:12.720 --> 00:09:14.495
He's just if you're asking

189
00:09:14.495 --> 00:09:15.915
for a factual question,

190
00:09:15.920 --> 00:09:17.708
I think he can answer that.

191
00:09:17.710 --> 00:09:19.929
I'm not sure why you need him

192
00:09:19.929 --> 00:09:22.140
to make a legal. Assertion.

193
00:09:26.210 --> 00:09:29.600
Yeah, I'm not a legal expert.

194
00:09:29.600 --> 00:09:31.907
But I do know there's a 1938

195
00:09:31.907 --> 00:09:35.963
agreement as we site in the EIS that.

196
00:09:35.970 --> 00:09:38.924
Discuss is that and it's based on.

197
00:09:38.930 --> 00:09:40.560
I said hi to study.

198
00:09:43.000 --> 00:09:45.430
Do you know how much water?

199
00:09:45.430 --> 00:09:48.600
What percent is actually derived

200
00:09:48.600 --> 00:09:51.136
from diversion structures on?

201
00:09:51.140 --> 00:09:54.360
Privately owned EMI land.

202
00:09:54.360 --> 00:09:57.080
I do not know. Does anyone?

203
00:10:00.070 --> 00:10:00.769

I'm not sure.

204
00:10:03.180 --> 00:10:08.910
Why is the fact that 30% of the water in

205
00:10:08.910 --> 00:10:11.836
the license area streams derived from

206
00:10:11.836 --> 00:10:14.830
privately owned lands of any significance

207
00:10:14.907 --> 00:10:17.587
whatsoever worth mentioning the EIS?

208
00:10:20.910 --> 00:10:22.896
It is for the purposes of

209
00:10:22.896 --> 00:10:24.220
the no action alternative,

210
00:10:24.220 --> 00:10:26.859
so if no water release was issued.

211
00:10:26.860 --> 00:10:29.352
Is understood that 30% of the water

212
00:10:29.352 --> 00:10:31.971
that does flow through there that's

213
00:10:31.971 --> 00:10:34.917
derived from those privately owned lands?

214
00:10:34.920 --> 00:10:36.414
Could be diverted.

215
00:10:36.414 --> 00:10:41.129
It is understood, understood by whom?

216
00:10:41.130 --> 00:10:44.569
This state. And am I,

217
00:10:44.569 --> 00:10:47.810
do you think the state of Hawaii?

218
00:10:47.810 --> 00:10:52.010
Is believes and asserts that.

219
00:10:52.010 --> 00:10:56.500
EMI is entitled to 30% of the water.

220
00:10:56.500 --> 00:10:58.180
In the license area.

221
00:11:01.110 --> 00:11:02.646
I can't speak for the state,

222
00:11:02.650 --> 00:11:04.243
but it's disgusting.

223
00:11:04.243 --> 00:11:05.836
That 1938 agreement.

224
00:11:05.840 --> 00:11:07.128
OK, you can't speak for the state,

225
00:11:07.130 --> 00:11:08.789
but you just did you say it

226
00:11:08.789 --> 00:11:10.079
was understood by the state?

227
00:11:10.080 --> 00:11:12.936
So now you agree you have no basis

228
00:11:12.936 --> 00:11:14.852
for saying the state understands

229
00:11:14.852 --> 00:11:17.666
that 30% of the water is derived

230
00:11:17.666 --> 00:11:19.360

from privately owned lands.

231
00:11:22.810 --> 00:11:23.400
Correct?

232
00:11:25.670 --> 00:11:29.585
Mr. Franco. If you're trying to get

233
00:11:29.585 --> 00:11:31.606
him to say something differently from

234
00:11:31.606 --> 00:11:35.960
what he wrote or is written in the EIS.

235
00:11:35.960 --> 00:11:39.000
I I'm not sure where you're going here.

236
00:11:39.000 --> 00:11:40.910
I'm asking what the significance

237
00:11:40.910 --> 00:11:43.280
is of this he just said.

238
00:11:43.280 --> 00:11:45.788
The significance is because of this

239
00:11:45.788 --> 00:11:47.460
understanding now acknowledges he

240
00:11:47.527 --> 00:11:49.585
doesn't know what the state knows.

241
00:11:49.590 --> 00:11:51.319
So I want to note this phrase.

242
00:11:51.320 --> 00:11:52.763
It is understood.

243
00:11:52.763 --> 00:11:54.687
Is that understanding actually

244
00:11:54.687 --> 00:11:57.348
just A and B&M is understanding?

245
00:12:03.760 --> 00:12:06.013
So what I picked up from the 1938

246
00:12:06.013 --> 00:12:09.324
agreement that you picked up all right.

247
00:12:09.330 --> 00:12:10.818
Mr. Frankel, just for the record,

248
00:12:10.820 --> 00:12:13.610
did you provide questions to Mr.

249
00:12:13.610 --> 00:12:16.250
Beaupre in advance? I did not.

250
00:12:20.190 --> 00:12:25.094
Uhm? I would like to now move to.

251
00:12:25.100 --> 00:12:32.360
A page 2 dash 21. Oops, shoot. Yeah.

252
00:12:44.140 --> 00:12:45.370
You

253
00:12:47.570 --> 00:12:49.634
ah, describes some infrastructure

254
00:12:49.634 --> 00:12:51.698
improvements to be made

255
00:12:51.698 --> 00:12:54.117
to the cooler agpa hum.

256
00:12:54.117 --> 00:12:57.036
Can you describe for us what those

257
00:12:57.036 --> 00:12:58.840

improvements are going to be?

258
00:13:03.300 --> 00:13:05.841
I'm not sure, I just know it's

259
00:13:05.841 --> 00:13:08.099
to improve the efficiency of

260
00:13:08.099 --> 00:13:10.809
delivering water to collect park.

261
00:13:10.810 --> 00:13:13.150
You have no idea how that

262
00:13:13.150 --> 00:13:15.770
efficiency is going to be achieved.

263
00:13:15.770 --> 00:13:18.486
No. Do you have any idea when

264
00:13:18.486 --> 00:13:20.970
this is supposed to happen? No.

265
00:13:23.520 --> 00:13:25.109
And where did you get this information?

266
00:13:27.610 --> 00:13:30.208
It is provided by our client.

267
00:13:30.210 --> 00:13:33.150
From a hippo or anv.

268
00:13:33.150 --> 00:13:35.010
A&B was their client. OK.

269
00:13:37.330 --> 00:13:39.550
Uhm? You're aware?

270
00:13:41.570 --> 00:13:46.930
That dumb. Stop sharing screen for a bit.

271
00:13:46.930 --> 00:13:49.858
You're aware that the water Commission.

272
00:13:49.860 --> 00:13:53.466
Uh, said that 20% transmission system

273
00:13:53.466 --> 00:13:55.470
losses are not acceptable, right?

274
00:13:55.470 --> 00:13:57.220
Do you remember the water

275
00:13:57.220 --> 00:13:58.300
Commission saying that?

276
00:13:58.300 --> 00:14:00.358
I do not. You do not.

277
00:14:00.360 --> 00:14:04.266
Did you read the Water Commission's decision?

278
00:14:04.270 --> 00:14:08.690
The 2018 Seymour Indian Oh yes I did,

279
00:14:08.690 --> 00:14:10.930
but it was a long time ago.

280
00:14:10.930 --> 00:14:13.660
So you don't recall reading anything about

281
00:14:13.660 --> 00:14:16.542
the need to reduce transmission losses.

282
00:14:16.542 --> 00:14:18.946
I do not recall.

283
00:14:18.950 --> 00:14:20.918
Does it? Yeah yes.

284
00:14:20.918 --> 00:14:23.865

Consider what specific proposals of the

285
00:14:23.865 --> 00:14:26.282
EIS consider to reduce system losses,

286
00:14:26.282 --> 00:14:27.356
leakage and waste.

287
00:14:30.240 --> 00:14:33.048
What does the S propose to reduce that?

288
00:14:33.050 --> 00:14:36.310
Yes. Yeah, I believe in our

289
00:14:36.310 --> 00:14:38.015
alternatives chapter. We do discuss

290
00:14:38.015 --> 00:14:40.205
a line in reservoirs and dishes.

291
00:14:42.340 --> 00:14:43.940
As a potential ternative,

292
00:14:43.940 --> 00:14:46.040
I'm sorry. What did you say?

293
00:14:46.040 --> 00:14:47.990
I said as a potential alternative?

294
00:14:47.990 --> 00:14:52.196
So just lighting reservoirs and dishes.

295
00:14:52.200 --> 00:14:54.836
And does your EIS discuss, say,

296
00:14:54.836 --> 00:14:57.340
just lining one reservoir,

297
00:14:57.340 --> 00:14:59.307
two or three reservoirs as an option?

298
00:15:02.120 --> 00:15:03.228
I do not recall.

299
00:15:06.900 --> 00:15:08.485
How many reservoirs do you

300
00:15:08.485 --> 00:15:10.070
think are currently in use?

301
00:15:12.090 --> 00:15:13.058
I do not know.

302
00:15:17.640 --> 00:15:19.704
Oh no, well, let's bring this page up.

303
00:15:37.170 --> 00:15:40.188
On Page 3 dash 12. I don't know

304
00:15:40.188 --> 00:15:41.900
if you can bring this up a bit.

305
00:15:45.130 --> 00:15:48.214
You right seepage of water is

306
00:15:48.214 --> 00:15:50.250
not necessarily lost. Right?

307
00:15:53.420 --> 00:16:00.307
Yes. Uhm? How much of the water that seeps

308
00:16:00.307 --> 00:16:03.031
into the ground actually flows into the

309
00:16:03.031 --> 00:16:05.418
aquifer and stays there? I do not know.

310
00:16:08.850 --> 00:16:13.210
K. Do you believe that seepage

311
00:16:13.210 --> 00:16:15.450

of water into the ground?

312
00:16:15.450 --> 00:16:17.305
Is a reasonable use of water that

313
00:16:17.305 --> 00:16:18.820
comes from streams at a D water.

314
00:16:22.740 --> 00:16:25.128
I'm not sure what you're asking.

315
00:16:28.590 --> 00:16:34.390
Uhm? Is it reasonable?

316
00:16:34.390 --> 00:16:37.730
To take water from streams.

317
00:16:37.730 --> 00:16:39.075
Put them into reservoirs where

318
00:16:39.075 --> 00:16:40.420
they seek into the ground.

319
00:16:43.580 --> 00:16:45.680
Not an expert, not a hydrologist.

320
00:16:45.680 --> 00:16:46.964
I wouldn't know, OK,

321
00:16:46.964 --> 00:16:49.840
although you do send your last sentence here.

322
00:16:49.840 --> 00:16:51.548
It can be stated the seepage it.

323
00:16:51.550 --> 00:16:52.732
It can be stated again this

324
00:16:52.732 --> 00:16:53.830
is in the passive voice.

325
00:16:53.830 --> 00:16:55.930
I don't know who's stating it can

326
00:16:55.930 --> 00:16:57.829
be stated that seepage at the

327
00:16:57.829 --> 00:17:00.013
reservoirs is not deemed as a waste

328
00:17:00.082 --> 00:17:02.290
of water due to its contribution

329
00:17:02.290 --> 00:17:03.762
to recharging the aquifer.

330
00:17:03.770 --> 00:17:05.650
That's what you wrote.

331
00:17:05.650 --> 00:17:08.094
Correct, I also said that the EIS was

332
00:17:08.094 --> 00:17:10.089
helped prepared by technical experts,

333
00:17:10.090 --> 00:17:12.596
and this came from our technical expert.

334
00:17:12.600 --> 00:17:15.378
Which technical expert?

335
00:17:15.380 --> 00:17:17.708
Go in associates.

336
00:17:17.710 --> 00:17:18.020
Sure.

337
00:17:21.650 --> 00:17:23.568
Do you know if contributions to the

338
00:17:23.568 --> 00:17:25.360

groundwater outweigh the cost of the streams?

339
00:17:27.480 --> 00:17:28.128
I do not know.

340
00:17:47.660 --> 00:17:51.404
Yes, I should maybe turn to that page.

341
00:18:04.530 --> 00:18:08.940
Yeah, it says that losses uhm?

342
00:18:08.940 --> 00:18:13.107
Do not take place with an MI aqueduct system.

343
00:18:13.110 --> 00:18:17.169
There is no net seepage loss in the EMI

344
00:18:17.169 --> 00:18:20.165
Aquaduct system up to the Como LER.

345
00:18:20.170 --> 00:18:23.590
You call writing, writing that.

346
00:18:23.590 --> 00:18:26.438
Yes. Did you come?

347
00:18:28.570 --> 00:18:29.998
Have you read that?

348
00:18:29.998 --> 00:18:32.140
Have you actually read the USGS

349
00:18:32.217 --> 00:18:34.660
report that discusses this? I have

350
00:18:38.060 --> 00:18:41.710
you have read that report, yes.

351
00:18:41.710 --> 00:18:43.150
Is there anywhere that report

352
00:18:43.150 --> 00:18:45.140
that it says there's no net loss?

353
00:18:48.760 --> 00:18:49.588
I do not recall.

354
00:18:52.830 --> 00:18:55.296
Is there anywhere in that report

355
00:18:55.296 --> 00:18:58.080
that says it's not worth lining?

356
00:18:58.080 --> 00:19:01.540
Those come. The ditch is.

357
00:19:03.620 --> 00:19:04.580
I do not recall.

358
00:19:06.850 --> 00:19:09.440
If that report does not say that

359
00:19:09.440 --> 00:19:11.989
there is no net system loss.

360
00:19:11.990 --> 00:19:15.580
Have you misrepresented that report?

361
00:19:15.580 --> 00:19:17.840
I'm Jack is calling for

362
00:19:17.840 --> 00:19:18.744
speculation hypothetically.

363
00:19:24.530 --> 00:19:25.340
Yeah Mr. Franco,

364
00:19:25.340 --> 00:19:27.684
I think it'd be best if you stuck

365
00:19:27.684 --> 00:19:29.629

to asking him factual questions.

366
00:19:29.630 --> 00:19:33.629
It is a factual question. My question is.

367
00:19:33.630 --> 00:19:37.256
Is this statement here in the EIS?

368
00:19:37.260 --> 00:19:41.026
It's not reflected in the USGS report.

369
00:19:41.030 --> 00:19:42.374
Has he misrepresented

370
00:19:42.374 --> 00:19:44.614
what the USGS study said?

371
00:19:46.860 --> 00:19:48.720
Same objection, he's assuming fax.

372
00:19:48.720 --> 00:19:52.129
It doesn't establish that it's not there.

373
00:19:52.130 --> 00:19:54.630
So it's a improper hypothetical

374
00:19:54.630 --> 00:19:56.130
calls for speculation.

375
00:19:56.130 --> 00:19:58.178
I'll join the objection.

376
00:19:58.180 --> 00:20:00.274
Those are not appropriate objections in

377
00:20:00.274 --> 00:20:02.488
a contested case hearing he can answer.

378
00:20:05.500 --> 00:20:10.010
Could you please explain why you think, uhm?

379
00:20:10.010 --> 00:20:14.130
It's OK. Why the questions? OK yeah.

380
00:20:16.240 --> 00:20:17.564
What is your response?

381
00:20:17.564 --> 00:20:20.340
What is your response to the objections?

382
00:20:20.340 --> 00:20:21.684
My response to objections.

383
00:20:21.684 --> 00:20:23.028
There's no those objections,

384
00:20:23.030 --> 00:20:25.318
have no basis in a contested case hearing.

385
00:20:25.320 --> 00:20:27.005
He claims the statements in

386
00:20:27.005 --> 00:20:29.400
the EIS are true and accurate.

387
00:20:29.400 --> 00:20:33.848
The USGS study says nothing of the kind.

388
00:20:33.850 --> 00:20:34.918
A&B for years now,

389
00:20:34.918 --> 00:20:35.986
has been attempting to

390
00:20:35.986 --> 00:20:37.370
make this representation,

391
00:20:37.370 --> 00:20:39.050
which is complete shibby.

392
00:20:39.050 --> 00:20:41.570

This statement is not found in

393
00:20:41.651 --> 00:20:44.123
the in the in that report at all,

394
00:20:44.130 --> 00:20:46.290
nothing like that is said in the report.

395
00:20:46.290 --> 00:20:47.754
That was not the purpose of the report.

396
00:20:47.760 --> 00:20:49.332
It doesn't say that he claims

397
00:20:49.332 --> 00:20:50.380
he's read the report.

398
00:20:53.860 --> 00:20:55.060
May I respond to that?

399
00:20:55.060 --> 00:20:56.980
I mean yeah, go ahead,

400
00:20:56.980 --> 00:20:59.140
you know whatever the report says,

401
00:20:59.140 --> 00:21:01.558
it says. I mean, you know,

402
00:21:01.560 --> 00:21:03.132
asking him to speculate about what

403
00:21:03.132 --> 00:21:04.898
might be or what might not be.

404
00:21:04.900 --> 00:21:06.636
He's claiming that there's not in there.

405
00:21:06.640 --> 00:21:07.900
Well, put the report and

406
00:21:07.900 --> 00:21:08.908
argue from the report.

407
00:21:08.910 --> 00:21:10.566
Don't badger this witness about it.

408
00:21:18.390 --> 00:21:18.940
Oops.

409
00:21:22.770 --> 00:21:26.490
Mr. Beaupre, do you see the?

410
00:21:26.490 --> 00:21:30.600
USGS study on your screen now. Yes.

411
00:21:32.690 --> 00:21:36.197
Can you point me to the page where it says?

412
00:21:36.197 --> 00:21:39.760
There's no net secrets loss in the

413
00:21:39.871 --> 00:21:44.640
enm I did system. I couldn't do that.

414
00:21:44.640 --> 00:21:46.306
Thank you, I have no further questions.

415
00:21:50.120 --> 00:21:50.849
KA and B.

416
00:21:55.180 --> 00:21:55.820
I have no pulse.

417
00:21:57.940 --> 00:22:01.290
County, Maui I have no questions for

418
00:22:01.290 --> 00:22:04.520
this witness, thanks. Right are we done?

419
00:22:06.990 --> 00:22:08.506

All right, Mr Beaupre,

420
00:22:08.506 --> 00:22:11.450
thank you for your time this morning.

421
00:22:11.450 --> 00:22:13.613
And you're welcome to stay and turn

422
00:22:13.613 --> 00:22:15.909
off your video and audio and listen.

423
00:22:15.910 --> 00:22:18.438
Or you can go on your merry way

424
00:22:18.438 --> 00:22:20.548
for the day. Alright, thank you.

425
00:22:23.010 --> 00:22:25.612
OK, now we have Mr. Tanaka. Next,

426
00:22:25.612 --> 00:22:27.579
do we need a break or anything?

427
00:22:29.990 --> 00:22:32.726
Nope. I would just like to ask Mr Frankel

428
00:22:32.726 --> 00:22:35.304
if he would like to speak with you.

429
00:22:35.310 --> 00:22:38.314
Or do you still want to call Mr Chan?

430
00:22:38.314 --> 00:22:40.049
So as I mentioned yesterday,

431
00:22:40.050 --> 00:22:41.780
I guess you weren't involved.

432
00:22:41.780 --> 00:22:43.887
We're going to go through Wayne Tanaka.

433
00:22:43.890 --> 00:22:45.150
I'm going to need 10 minutes

434
00:22:45.150 --> 00:22:46.430
after that to think about it.

435
00:22:46.430 --> 00:22:48.329
I told you that I'd send you an email,

436
00:22:48.330 --> 00:22:49.610
so I'll let everybody

437
00:22:49.610 --> 00:22:51.210
here on the zoom though,

438
00:22:51.210 --> 00:22:53.010
and I'll send you an email.

439
00:22:53.010 --> 00:22:54.080
Alright, thank you very much.

440
00:22:58.240 --> 00:23:01.336
OK, we're going to proceed. It is let

441
00:23:01.336 --> 00:23:05.480
me just check that I'm here. 9:25 AM.

442
00:23:07.580 --> 00:23:09.764
We are going to proceed with Mr.

443
00:23:09.770 --> 00:23:13.874
Tanaka, and it's a Sierra Club witness so.

444
00:23:13.880 --> 00:23:16.856
Then the child, would you please

445
00:23:16.856 --> 00:23:19.880
swear in our witness Mr Tanaka?

446
00:23:19.880 --> 00:23:23.340

Good morning Mr TA Tanaka.

447
00:23:23.340 --> 00:23:25.364
There is only swear to tell the truth,

448
00:23:25.370 --> 00:23:27.618
the whole truth and nothing but the truth.

449
00:23:27.620 --> 00:23:29.310
I do, yes, thank you.

450
00:23:31.720 --> 00:23:35.392
To talk, if you signed a

451
00:23:35.392 --> 00:23:37.996
declaration in this matter,

452
00:23:38.000 --> 00:23:40.448
yes, and other statements in it,

453
00:23:40.450 --> 00:23:42.546
true and accurate as far as you know?

454
00:23:42.550 --> 00:23:45.294
Oh yeah, yes, OK.

455
00:23:45.294 --> 00:23:49.204
I turn circle turns waiting Tanaka

456
00:23:49.204 --> 00:23:52.696
over to folks to cross examine.

457
00:23:56.970 --> 00:24:01.690
OK, uh Andy. Yes, it's David. Show my

458
00:24:01.690 --> 00:24:04.740
server half with Andy and you. Right?

459
00:24:06.980 --> 00:24:07.740
Good morning.

460
00:24:11.570 --> 00:24:11.970
OK.

461
00:24:14.770 --> 00:24:18.127
I'd just like to begin by asking a general

462
00:24:18.127 --> 00:24:22.000
question about whether the Sierra Club.

463
00:24:22.000 --> 00:24:24.043
Supports a agriculture

464
00:24:24.043 --> 00:24:27.448
in the state of Hawaii.

465
00:24:27.450 --> 00:24:29.606
Yeah, I think you know local food

466
00:24:29.606 --> 00:24:32.610
production is something that we've spotted.

467
00:24:32.610 --> 00:24:34.720
Alright, and come with this

468
00:24:34.720 --> 00:24:36.408
air club you know,

469
00:24:36.410 --> 00:24:38.506
recognize the constitutional mandate

470
00:24:38.506 --> 00:24:44.300
to the state and subdivisions to to promote.

471
00:24:44.300 --> 00:24:47.540
The first fight agriculture increase

472
00:24:47.540 --> 00:24:49.484
agricultural self sufficiency

473
00:24:49.484 --> 00:24:52.090

and conserve agricultural lands.

474
00:24:54.370 --> 00:24:56.878
Uhm, as a constitutional provision, yes,

475
00:24:56.878 --> 00:24:59.944
uh, not sure about the exact language,

476
00:24:59.950 --> 00:25:02.850
but I'm aware that there's some agricultural

477
00:25:02.850 --> 00:25:06.050
provisions in the Constitution.

478
00:25:06.050 --> 00:25:10.996
And uhm. Is Sierra Clements support

479
00:25:10.996 --> 00:25:14.410
of return of agriculture to important

480
00:25:14.498 --> 00:25:17.608
agricultural lands in Central Maui?

481
00:25:17.610 --> 00:25:21.322
I don't know if we've taken a position

482
00:25:21.322 --> 00:25:24.980
from formal position on on that.

483
00:25:24.980 --> 00:25:27.924
OK, so uhm. So, so you're not sure

484
00:25:27.924 --> 00:25:30.708
where the Sierra Club does or does

485
00:25:30.708 --> 00:25:33.665
not support the return of important

486
00:25:33.665 --> 00:25:38.230
agricultural lands in Central Maui, too.

487
00:25:38.230 --> 00:25:40.670
Agricultural news no.

488
00:25:40.670 --> 00:25:42.718
I haven't looked at, I mean, uh,

489
00:25:42.718 --> 00:25:44.790
I just started this position in October.

490
00:25:44.790 --> 00:25:46.408
I have to look at our, you know,

491
00:25:46.408 --> 00:25:47.906
our records to see if we've taken

492
00:25:47.906 --> 00:25:49.599
a firm position that particular.

493
00:25:49.600 --> 00:25:50.180
Policy.

494
00:25:55.990 --> 00:25:59.626
Uhm, you know one of the things that the

495
00:25:59.626 --> 00:26:03.260
your in you that you did in your soul.

496
00:26:05.520 --> 00:26:08.215
In your written testimony, you refer to

497
00:26:08.215 --> 00:26:11.870
a table that you prepared exhibit. Uhm?

498
00:26:14.140 --> 00:26:17.440
Y-1, remember that yes, OK,

499
00:26:17.440 --> 00:26:19.526
and in this exhibit, what was the

500
00:26:19.526 --> 00:26:21.479

point that you were trying to

501
00:26:21.479 --> 00:26:23.465
make when you prepare this table?

502
00:26:26.850 --> 00:26:28.662
We're trying to, well,

503
00:26:28.662 --> 00:26:31.298
we were. I was trying to.

504
00:26:34.660 --> 00:26:37.368
Condense the information provided

505
00:26:37.368 --> 00:26:40.076
in the quarterly reports.

506
00:26:40.080 --> 00:26:41.952
We got in water use so that we can

507
00:26:41.952 --> 00:26:43.699
understand how water was used and not used.

508
00:26:45.760 --> 00:26:48.800
And, uh, in in one of the positions

509
00:26:48.800 --> 00:26:52.382
at the shark has taken in this case,

510
00:26:52.382 --> 00:26:56.388
is that my point was wasting water because

511
00:26:56.390 --> 00:27:01.217
the system losses are in excess of the 22.7%.

512
00:27:01.217 --> 00:27:05.536
That is discussed in the sea Worm

513
00:27:05.540 --> 00:27:08.126
2018 decision order, is that correct?

514
00:27:08.130 --> 00:27:10.437
I believe so now.

515
00:27:10.437 --> 00:27:13.931
Have you read the portions of the 2018

516
00:27:13.931 --> 00:27:18.406
decision in order that discuss how the

517
00:27:18.406 --> 00:27:22.986
22.7% was derived? A long time ago,

518
00:27:22.986 --> 00:27:26.220
I can't really recall the specifics.

519
00:27:26.220 --> 00:27:27.996
Uh, well do you recall that?

520
00:27:28.000 --> 00:27:31.573
Come and if you want to refer to it,

521
00:27:31.580 --> 00:27:35.738
it's exhibit Y46 and perhaps actually,

522
00:27:35.740 --> 00:27:40.416
could we? Nicole, could you put a?

523
00:27:40.420 --> 00:27:43.429
Why 46 up?

524
00:27:43.430 --> 00:27:48.430
And uhm scroll to page. 182

525
00:28:07.910 --> 00:28:11.264
so are you just talking about 182

526
00:28:11.264 --> 00:28:15.220
of the PDF or 182 of the document?

527
00:28:15.220 --> 00:28:17.999

Document. The page number on the bottom.

528
00:28:24.100 --> 00:28:28.710
So that's 205 of the PDF. That's right.

529
00:28:45.230 --> 00:28:50.894
So actually, if you can scroll further too.

530
00:28:50.900 --> 00:28:53.668
Page one, page 292 of the document which

531
00:28:53.668 --> 00:28:58.076
is 215 of the PDF and there's a paragraph.

532
00:28:58.080 --> 00:29:02.770
This paragraph 720-9730. Uhm?

533
00:29:02.770 --> 00:29:05.510
And I just wanted you to take a look at that.

534
00:29:05.510 --> 00:29:09.910
There's a discussion there about how H CNS.

535
00:29:09.910 --> 00:29:13.363
Uhm? Uh, you know, calculated.

536
00:29:13.363 --> 00:29:16.254
I mean, you know obtained the benchmark

537
00:29:16.254 --> 00:29:20.744
against which the 22.7% rate could be

538
00:29:20.744 --> 00:29:23.224
compared based on secret evaporation.

539
00:29:23.230 --> 00:29:24.960
Do you see that discussion

540
00:29:24.960 --> 00:29:26.890
that goes from page 730?

541
00:29:26.890 --> 00:29:31.378
I mean paragraph 73 and it continues.

542
00:29:31.380 --> 00:29:32.328
On the next page.

543
00:29:41.940 --> 00:29:42.850
Listen.

544
00:29:47.910 --> 00:29:52.368
OK, right now I I notice from your direct

545
00:29:52.368 --> 00:29:55.678
test when you are engineer is that right?

546
00:29:55.680 --> 00:29:57.785
Yes I have a bachelors

547
00:29:57.785 --> 00:29:59.048
in general engineering.

548
00:29:59.050 --> 00:30:03.117
OK so when when we talk about

549
00:30:03.117 --> 00:30:06.440
calculating evaporation?

550
00:30:06.440 --> 00:30:10.199
You know, based on exposed surface area,

551
00:30:10.200 --> 00:30:12.804
in order to derive a estimate

552
00:30:12.804 --> 00:30:15.224
of evaporation for like water

553
00:30:15.224 --> 00:30:17.208
and ditches and reservoirs,

554
00:30:17.210 --> 00:30:18.374

I'm giving general understanding

555
00:30:18.374 --> 00:30:19.790
of how that works, right?

556
00:30:22.610 --> 00:30:25.510
Uh. Graters sure that surface

557
00:30:25.510 --> 00:30:27.610
area is a factor in Baffin,

558
00:30:27.610 --> 00:30:30.098
a phase transition transit

559
00:30:30.098 --> 00:30:34.248
transitions OK and as far as in when

560
00:30:34.248 --> 00:30:37.250
we're talking about evaporation.

561
00:30:37.250 --> 00:30:39.542
I mean the more exposed surface

562
00:30:39.542 --> 00:30:42.901
area there is of a body of water in

563
00:30:42.901 --> 00:30:45.530
relation to the volume of the water,

564
00:30:45.530 --> 00:30:48.074
then the higher the.

565
00:30:48.074 --> 00:30:50.420
Uh, the rate of evaporation will be

566
00:30:50.420 --> 00:30:52.550
as a percentage of the fire, correct?

567
00:30:55.660 --> 00:30:59.648
More. Surface area problem.

568
00:30:59.650 --> 00:31:02.000
Let me withdraw the question.

569
00:31:02.000 --> 00:31:05.256
OK, yeah, that's correct.

570
00:31:05.256 --> 00:31:08.968
But if you had a glass of water.

571
00:31:08.970 --> 00:31:11.525
OK, and you were trying to calculate

572
00:31:11.525 --> 00:31:13.603
how much evaporation was to be

573
00:31:13.603 --> 00:31:15.439
expected from the glass of water.

574
00:31:15.440 --> 00:31:17.732
You'd look at the surface area

575
00:31:17.732 --> 00:31:20.010
uncovered surface area in the glass.

576
00:31:20.010 --> 00:31:23.396
And then you know the and you

577
00:31:23.396 --> 00:31:25.027
look at the volume of the water.

578
00:31:25.030 --> 00:31:26.971
It's a develop.

579
00:31:26.971 --> 00:31:30.206
You know how the evaporation.

580
00:31:30.210 --> 00:31:31.740
What the rate of evaporation is

581
00:31:31.740 --> 00:31:33.240

relative to the volume of water,

582
00:31:33.240 --> 00:31:33.700
correct?

583
00:31:36.440 --> 00:31:39.695
Sure. As a factor, it's one factor,

584
00:31:39.700 --> 00:31:41.332
and if you pour the water

585
00:31:41.332 --> 00:31:43.089
from the glass into the plate.

586
00:31:43.090 --> 00:31:45.064
So now you know it's very shallow,

587
00:31:45.070 --> 00:31:46.798
but there's a lot of surface

588
00:31:46.798 --> 00:31:48.575
area then because the.

589
00:31:48.575 --> 00:31:51.545
The proportion of surface area to

590
00:31:51.545 --> 00:31:54.567
the total volume is now higher.

591
00:31:54.570 --> 00:31:56.453
Then you're going to have a higher

592
00:31:56.453 --> 00:31:58.860
rate of evaporation, right?

593
00:31:58.860 --> 00:32:01.540
As a percentage of the amount of water.

594
00:32:01.540 --> 00:32:04.319
As a percentage of water, yes,

595
00:32:04.319 --> 00:32:06.414
and you understand that that's

596
00:32:06.414 --> 00:32:08.562
basically the sort of calculation

597
00:32:08.562 --> 00:32:11.341
that was done as described in the

598
00:32:11.341 --> 00:32:14.537
DNO when an estimate was made of his

599
00:32:14.537 --> 00:32:16.940
operation in terms of a CNS operations.

600
00:32:19.860 --> 00:32:23.035
Uh. Again, that's one factor I'm

601
00:32:23.035 --> 00:32:24.896
not sure about other, you know,

602
00:32:24.896 --> 00:32:25.880
temperature, there's other.

603
00:32:25.880 --> 00:32:27.560
There's other things that and pressure.

604
00:32:27.560 --> 00:32:29.512
There's other things that

605
00:32:29.512 --> 00:32:30.976
influence evaporation rates.

606
00:32:30.980 --> 00:32:33.038
Right, I mean the pan evaporation

607
00:32:33.038 --> 00:32:34.576
rate would be a factor,

608
00:32:34.576 --> 00:32:36.094

but then that would be multiplied

609
00:32:36.094 --> 00:32:39.610
by the surface area, right? Uh.

610
00:32:42.960 --> 00:32:44.435
I'm not sure if multiplication

611
00:32:44.435 --> 00:32:47.351
is the right function, but yeah,

612
00:32:47.351 --> 00:32:49.006
there might be some way.

613
00:32:49.010 --> 00:32:50.818
Well, let's put it this way you understand

614
00:32:50.818 --> 00:32:52.697
and this is sort of intuitively obvious.

615
00:32:52.700 --> 00:32:53.830
Whether your engineer or not,

616
00:32:53.830 --> 00:32:56.094
but if you had a glass of water.

617
00:32:56.100 --> 00:32:57.228
You might have operation.

618
00:32:57.228 --> 00:32:59.208
You're going to have from that glass

619
00:32:59.208 --> 00:33:01.088
of water over the course of the day.

620
00:33:01.090 --> 00:33:03.520
Alright, he's going to be less

621
00:33:03.520 --> 00:33:06.780
than if you pour it into the plate.

622
00:33:06.780 --> 00:33:08.320
Where there's more interaction

623
00:33:08.320 --> 00:33:10.271
with the atmosphere, right?

624
00:33:10.271 --> 00:33:14.226
Yeah yes and with seepage.

625
00:33:14.230 --> 00:33:18.371
Seepage is calculated in relationship

626
00:33:18.371 --> 00:33:20.870
to the wetted surface area of the

627
00:33:20.934 --> 00:33:22.839
vessel that's holding the water.

628
00:33:22.840 --> 00:33:24.961
So in the case of the plantation

629
00:33:24.961 --> 00:33:27.403
it would be the the wetted surface

630
00:33:27.403 --> 00:33:29.593
area of the dishes where water

631
00:33:29.667 --> 00:33:33.280
is being carried and the.

632
00:33:33.280 --> 00:33:35.300
Uhm, and then the the.

633
00:33:35.300 --> 00:33:37.420
The portion of the reservoir

634
00:33:37.420 --> 00:33:39.400
that's in contact with the water,

635
00:33:39.400 --> 00:33:39.750

right?

636
00:33:42.880 --> 00:33:44.830
Again, there's multiple factors that

637
00:33:44.830 --> 00:33:47.072
affect rate of seepage, not just

638
00:33:47.072 --> 00:33:49.459
you know area and that's why did.

639
00:33:52.180 --> 00:33:55.340
But the but the area,

640
00:33:55.340 --> 00:33:58.286
this sweater is a prime factor

641
00:33:58.286 --> 00:34:01.266
in doing the calculation correct?

642
00:34:01.270 --> 00:34:03.300
The surface area it's weighted.

643
00:34:05.720 --> 00:34:07.924
Uh, I can. Well,

644
00:34:07.924 --> 00:34:11.238
there's other like porosity is, you know,

645
00:34:11.238 --> 00:34:13.470
I think I'm not sure if that's more.

646
00:34:13.470 --> 00:34:16.206
More significant effects and things like

647
00:34:16.206 --> 00:34:18.542
ferocity and and substrate composition

648
00:34:18.542 --> 00:34:21.636
and the substrate is a different factor.

649
00:34:21.640 --> 00:34:22.592
I'm just talking about.

650
00:34:22.592 --> 00:34:26.460
I mean, you have to determine what the.

651
00:34:26.460 --> 00:34:28.730
Material of the wall is,

652
00:34:28.730 --> 00:34:30.958
which is what the.

653
00:34:30.960 --> 00:34:32.520
The Department of Agricultural

654
00:34:32.520 --> 00:34:34.860
Handbook provides so it's earth or

655
00:34:34.927 --> 00:34:36.847
this concrete or something else.

656
00:34:36.850 --> 00:34:38.698
But then in terms of forecasting

657
00:34:38.698 --> 00:34:40.680
with the total amount of seepages,

658
00:34:40.680 --> 00:34:42.048
you still have to multiply it

659
00:34:42.048 --> 00:34:43.465
by the surface area that the

660
00:34:43.465 --> 00:34:45.900
water is in contact with, right?

661
00:34:45.900 --> 00:34:48.170
Sure, flux flux well yeah.

662
00:34:50.190 --> 00:34:53.744

That's a factor in flux through material.

663
00:34:53.744 --> 00:34:56.468
OK, and in general if if

664
00:34:56.468 --> 00:34:59.090
you have the same vessel.

665
00:34:59.090 --> 00:35:01.844
Uh, the more water that's in it, you know,

666
00:35:01.844 --> 00:35:03.820
in terms of the depth of the water,

667
00:35:03.820 --> 00:35:06.300
then the higher I mean, the more.

668
00:35:09.290 --> 00:35:10.592
The more serious you're going to

669
00:35:10.592 --> 00:35:12.454
have in turn, I mean the sorry,

670
00:35:12.454 --> 00:35:13.959
the lower that the rate

671
00:35:13.959 --> 00:35:15.630
of CPS is going to be.

672
00:35:15.630 --> 00:35:19.780
Let me let me withdraw that question so.

673
00:35:19.780 --> 00:35:21.970
If what you're concerned about

674
00:35:21.970 --> 00:35:24.160
is the percentage of evaporation

675
00:35:24.230 --> 00:35:25.760
percentage of seepage,

676
00:35:25.760 --> 00:35:27.572
then that's going to vary in

677
00:35:27.572 --> 00:35:29.526
terms of what the total volume

678
00:35:29.526 --> 00:35:31.548
is of the vessel also right?

679
00:35:34.510 --> 00:35:37.180
Sure percentage loss will be.

680
00:35:37.180 --> 00:35:40.687
Right, based on. What water is lost

681
00:35:40.687 --> 00:35:43.509
and versus what water you know was

682
00:35:43.509 --> 00:35:44.888
there in the first place, right?

683
00:35:44.888 --> 00:35:46.928
And so I mean, just to take an

684
00:35:46.928 --> 00:35:48.688
extreme example just to to.

685
00:35:48.690 --> 00:35:51.372
I mean if if the wailoa ditch witch can

686
00:35:51.372 --> 00:35:53.508
has a capacity of 200,000,000 gallons

687
00:35:53.508 --> 00:35:56.705
a day if you went to horrible stream

688
00:35:56.705 --> 00:35:58.960
and weather wailoa ditch process,

689
00:35:58.960 --> 00:36:00.408

one of those strings.

690
00:36:00.408 --> 00:36:03.361
And it was dry and you took a

691
00:36:03.361 --> 00:36:05.441
glass of water and you poured

692
00:36:05.441 --> 00:36:07.176
it into the wailoa ditch.

693
00:36:07.180 --> 00:36:09.574
Uh, the rate of evaporation and

694
00:36:09.574 --> 00:36:12.376
seepage to occur before it could reach

695
00:36:12.376 --> 00:36:15.015
Miles further West to come only where

696
00:36:15.093 --> 00:36:17.230
it would probably be 100%, right?

697
00:36:20.290 --> 00:36:20.740
So.

698
00:36:23.370 --> 00:36:24.914
Uh, percentage losses may

699
00:36:24.914 --> 00:36:27.230
be one way to think about.

700
00:36:27.230 --> 00:36:29.035
A standard for what we

701
00:36:29.035 --> 00:36:30.840
think is acceptable or not,

702
00:36:30.840 --> 00:36:33.280
I think if you just look at the

703
00:36:33.280 --> 00:36:36.970
hard numbers you're looking at, you know.

704
00:36:36.970 --> 00:36:38.986
In putting millions and millions of

705
00:36:38.986 --> 00:36:41.456
gallons of water per day into reservoirs

706
00:36:41.456 --> 00:36:44.965
that are not used and yet somehow the

707
00:36:44.965 --> 00:36:47.424
reservoirs aren't overfilling, right?

708
00:36:47.424 --> 00:36:49.760
So you're literally losing.

709
00:36:49.760 --> 00:36:54.110
You know, over in in many cases,

710
00:36:54.110 --> 00:36:57.966
over half of the water that's been diverted.

711
00:36:57.970 --> 00:37:00.904
Uhm? I think if you looked at the table.

712
00:37:03.140 --> 00:37:05.340
You'll see that the except

713
00:37:05.340 --> 00:37:07.540
for a handful of quarters,

714
00:37:07.540 --> 00:37:09.070
you're going to see the majority

715
00:37:09.070 --> 00:37:10.500
of the time you're losing.

716
00:37:10.500 --> 00:37:11.900

You know, something like.

717
00:37:11.900 --> 00:37:14.489
Half or even more like up to 80%

718
00:37:14.490 --> 00:37:17.890
of the water that's diverted.

719
00:37:17.890 --> 00:37:23.842
No looking again at uh exhibit AY 46.

720
00:37:23.842 --> 00:37:27.466
Uhm, if the dumb.

721
00:37:27.470 --> 00:37:30.974
You know there's a discussion of what the.

722
00:37:30.980 --> 00:37:35.330
Gross irrigation requirement is and.

723
00:37:37.730 --> 00:37:40.145
There's a calculation that basically

724
00:37:40.145 --> 00:37:42.560
takes the gross irrigation requirement.

725
00:37:42.560 --> 00:37:46.700
And uh, and then accounts for

726
00:37:46.700 --> 00:37:49.886
22.7% as expected system loss and

727
00:37:49.890 --> 00:37:52.850
that discussion starts on page.

728
00:38:02.090 --> 00:38:03.580
Well, listen, there's some tables

729
00:38:03.580 --> 00:38:07.380
that are listed on page 185.

730
00:38:07.380 --> 00:38:09.200
And there's a foot.

731
00:38:09.200 --> 00:38:11.020
There's footnotes in the

732
00:38:11.020 --> 00:38:13.396
talk about how the how the

733
00:38:13.396 --> 00:38:15.386
the gross and net irrigation

734
00:38:15.386 --> 00:38:16.580
requirements are calculated.

735
00:38:16.580 --> 00:38:17.168
You see that.

736
00:38:23.530 --> 00:38:25.410
Sure, yes, right so?

737
00:38:25.410 --> 00:38:27.760
So at the irrigation requirement

738
00:38:27.760 --> 00:38:30.576
is discussed at the top of the

739
00:38:30.576 --> 00:38:33.474
page of 89 point, 289.23 MGD.

740
00:38:33.474 --> 00:38:37.626
You know the net irrigation requirements.

741
00:38:37.630 --> 00:38:38.960
I'm sorry it's 89 point.

742
00:38:41.140 --> 00:38:45.350
23 that would so basically what what

743
00:38:45.350 --> 00:38:48.549

Dino is saying is that the expected

744
00:38:48.550 --> 00:38:51.655
system loss at that rate would be like 26

745
00:38:51.655 --> 00:38:55.228
million gallons per day, is that right?

746
00:38:55.230 --> 00:38:59.520
Yeah yeah, I think 123.

747
00:38:59.520 --> 00:39:03.419
No, if the uh and you understood,

748
00:39:03.420 --> 00:39:05.820
you understand that this is a very large

749
00:39:05.820 --> 00:39:08.170
system in terms of the infrastructure,

750
00:39:08.170 --> 00:39:12.910
correct, right? Yes, and the.

751
00:39:12.910 --> 00:39:15.238
And so it doesn't stand to reason that

752
00:39:15.238 --> 00:39:17.838
if you have a large system like this.

753
00:39:17.840 --> 00:39:19.786
And the total amount of water you're

754
00:39:19.786 --> 00:39:22.040
putting in the volume you're putting in.

755
00:39:22.040 --> 00:39:24.645
Is is contacting a similar

756
00:39:24.645 --> 00:39:26.295
amount of surface area?

757
00:39:26.295 --> 00:39:28.545
But it's a much smaller volume,

758
00:39:28.550 --> 00:39:30.573
so the seepage and evaporation for a

759
00:39:30.573 --> 00:39:32.444
small amount of water is necessarily

760
00:39:32.444 --> 00:39:34.974
going to be a much higher percentage than

761
00:39:34.974 --> 00:39:36.998
it would be for a large fire before.

762
00:39:40.260 --> 00:39:44.332
Uh, yes, and that's why.

763
00:39:44.332 --> 00:39:46.416
For example, if you took a Mr Franklin

764
00:39:46.416 --> 00:39:48.303
Glass of water that he likes to

765
00:39:48.303 --> 00:39:50.406
talk about and you pour it into the

766
00:39:50.406 --> 00:39:52.502
wailoa dish when it was dry at home.

767
00:39:52.510 --> 00:39:55.606
Nichols Stream 100% of it would be lost.

768
00:39:55.610 --> 00:39:57.500
To see this integration right?

769
00:39:57.500 --> 00:39:58.940
It would never reach come,

770
00:39:58.940 --> 00:40:03.130

only we're correct. Uh, sure.

771
00:40:05.900 --> 00:40:12.190
So, uh, now over time now, my hippo knows.

772
00:40:12.190 --> 00:40:15.142
Water use compared to what was being used

773
00:40:15.142 --> 00:40:17.916
during sugar is a very small fraction of

774
00:40:17.916 --> 00:40:20.389
what was used during certain correct.

775
00:40:20.390 --> 00:40:21.895
Back on the water diverted

776
00:40:21.895 --> 00:40:23.400
to turn the deferred amount.

777
00:40:23.400 --> 00:40:25.836
Let's say if it's 25 MGD,

778
00:40:25.840 --> 00:40:28.717
I mean that's over 100 million gallons

779
00:40:28.717 --> 00:40:32.528
a day less than the average diversion

780
00:40:32.528 --> 00:40:34.844
during sugar cultivation, correct?

781
00:40:34.844 --> 00:40:36.176
That's my understanding.

782
00:40:36.176 --> 00:40:39.996
So if during sugar cultivation, the the.

783
00:40:39.996 --> 00:40:43.188
The seepage and evaporation.

784
00:40:43.190 --> 00:40:47.446
Was you know being related to the

785
00:40:47.446 --> 00:40:49.858
volume of water which would be

786
00:40:49.860 --> 00:40:51.408
water several deep in the ditch?

787
00:40:51.410 --> 00:40:57.160
Is water several feet deep in reservoirs.

788
00:40:57.160 --> 00:40:59.120
I mean, doesn't it stand to reason

789
00:40:59.120 --> 00:41:01.240
that if you reduce that amount of

790
00:41:01.240 --> 00:41:03.620
water by the volume of water greatly,

791
00:41:03.620 --> 00:41:05.601
so there's just a shallower amount of

792
00:41:05.601 --> 00:41:08.096
water in the ditch and you can have

793
00:41:08.096 --> 00:41:09.540
more evaporation and generally more

794
00:41:09.540 --> 00:41:11.160
seepage in relation to the volume

795
00:41:11.160 --> 00:41:13.009
of water that's being transported?

796
00:41:18.300 --> 00:41:19.530
Uhm so.

797
00:41:21.840 --> 00:41:25.444

I don't know. Well, yes, but you're also.

798
00:41:25.444 --> 00:41:27.680
I mean, as in I don't know why

799
00:41:27.680 --> 00:41:28.880
we're stealing from maximum loss.

800
00:41:28.880 --> 00:41:30.952
Like why would we? You would also

801
00:41:30.952 --> 00:41:33.389
be able to reduce no matter what.

802
00:41:33.390 --> 00:41:35.922
It reduce loss waste of water

803
00:41:35.922 --> 00:41:37.610
at public trust resource.

804
00:41:37.610 --> 00:41:41.348
If you invested in improvements that would

805
00:41:41.348 --> 00:41:44.769
prevent seepage and prevent evaporation.

806
00:41:44.770 --> 00:41:47.300
Weather will see Lauren criminally.

807
00:41:47.300 --> 00:41:49.855
Right, but I mean, but that would.

808
00:41:49.860 --> 00:41:52.316
I mean, wouldn't that apply and no matter

809
00:41:52.316 --> 00:41:54.970
what the seepage and evaporation rate is?

810
00:41:54.970 --> 00:41:56.416
In other words,

811
00:41:56.416 --> 00:42:01.270
wouldn't that apply equally to the?

812
00:42:01.270 --> 00:42:03.460
The I mean any system.

813
00:42:03.460 --> 00:42:04.744
I mean, in theory you could

814
00:42:04.744 --> 00:42:06.200
reduce it by some amount, right?

815
00:42:08.860 --> 00:42:12.100
Right, so yeah, so let's let's do that here.

816
00:42:12.100 --> 00:42:14.540
Yeah, so so if you're looking at industry,

817
00:42:14.540 --> 00:42:16.150
you know standards or whatever.

818
00:42:16.150 --> 00:42:18.621
The DNO said that the 26 million

819
00:42:18.621 --> 00:42:20.810
gallons per day expected loss

820
00:42:20.810 --> 00:42:22.918
from seepage and evaporation.

821
00:42:22.920 --> 00:42:25.405
If you're importing 115 million

822
00:42:25.405 --> 00:42:28.540
gallons a day that was within

823
00:42:28.540 --> 00:42:30.052
industry standards, right?

824
00:42:30.052 --> 00:42:32.572

That's what's expected when you

825
00:42:32.572 --> 00:42:35.204
look at the material that the

826
00:42:35.204 --> 00:42:37.076
water is seeping through and when

827
00:42:37.076 --> 00:42:38.986
you look at the evaporation rate

828
00:42:38.986 --> 00:42:41.250
on the surface area of the water.

829
00:42:48.240 --> 00:42:49.764
Sure, but again,

830
00:42:49.764 --> 00:42:52.600
this is where the map we're looking at.

831
00:42:52.600 --> 00:42:55.028
Uh, like something like 1520

832
00:42:55.028 --> 00:42:56.276
million gallons of water per day.

833
00:42:56.280 --> 00:42:58.210
That's that's like entire streams

834
00:42:58.210 --> 00:43:00.140
that you could be restoring.

835
00:43:00.140 --> 00:43:03.230
You know, system losses, one metric.

836
00:43:03.230 --> 00:43:06.030
But there I mean,

837
00:43:06.030 --> 00:43:09.000
there's just absolute. You know?

838
00:43:11.500 --> 00:43:15.055
There's there's just basic quantities

839
00:43:15.055 --> 00:43:18.616
of water that represent significant,

840
00:43:18.616 --> 00:43:21.080
you know, habitat units. You know.

841
00:43:21.080 --> 00:43:22.120
Whatever other metrics aren't.

842
00:43:22.120 --> 00:43:24.808
You wanna look at that are

843
00:43:24.808 --> 00:43:26.152
being unnecessarily lost.

844
00:43:26.160 --> 00:43:28.060
Well, this has created.

845
00:43:28.060 --> 00:43:30.910
What are the vision system alright

846
00:43:30.998 --> 00:43:33.950
so so so 26 million gallons per day?

847
00:43:33.950 --> 00:43:36.165
That was, you know forecasts

848
00:43:36.165 --> 00:43:38.964
as the expectancy or or system

849
00:43:38.964 --> 00:43:41.449
loss with your sincere club.

850
00:43:41.450 --> 00:43:44.366
Saying that you disagree with the

851
00:43:44.366 --> 00:43:47.357

sea Worms Decision order saying that

852
00:43:47.357 --> 00:43:50.243
that was an acceptable amount for.

853
00:43:50.250 --> 00:43:52.959
You know the the projections that ECS

854
00:43:52.959 --> 00:43:55.180
had given for its diversified eggplant

855
00:43:55.180 --> 00:43:58.090
that are the subject of these paragraphs.

856
00:43:58.090 --> 00:44:00.076
So I could repeat that question.

857
00:44:00.080 --> 00:44:02.155
You know I'm gonna withdraw

858
00:44:02.155 --> 00:44:04.268
that question in terms of.

859
00:44:07.390 --> 00:44:10.036
I mean current. Currently the amount

860
00:44:10.036 --> 00:44:12.789
of water that's being diverted is.

861
00:44:12.790 --> 00:44:15.342
Again, a very small percentage of what was

862
00:44:15.342 --> 00:44:18.042
there during sugar and the absolute value

863
00:44:18.042 --> 00:44:21.488
of the amount that's being lost to see,

864
00:44:21.488 --> 00:44:24.122
generation is still less as an

865
00:44:24.122 --> 00:44:27.164
absolute value than what was lost

866
00:44:27.164 --> 00:44:30.590
during sugar cultivation, correct?

867
00:44:30.590 --> 00:44:33.957
Sure, I I don't think share cultivation

868
00:44:33.960 --> 00:44:36.935
a amount of water bread for circle

869
00:44:36.935 --> 00:44:39.450
cultivation was also not necessarily

870
00:44:39.450 --> 00:44:41.258
an acceptable amount either.

871
00:44:41.258 --> 00:44:44.332
Even when sugar is in conservation and

872
00:44:44.332 --> 00:44:47.590
you can have a higher rate of system loss

873
00:44:47.672 --> 00:44:50.647
for a lower volume of water diverted.

874
00:44:50.650 --> 00:44:51.942
But actually you're still,

875
00:44:51.942 --> 00:44:53.880
you're actually you could be taking

876
00:44:53.941 --> 00:44:57.170
less water from the streams, right?

877
00:44:57.170 --> 00:44:59.126
Uh, sure, right so.

878
00:44:59.126 --> 00:45:02.900

So focusing on the rate the the

879
00:45:02.900 --> 00:45:05.154
percentage is really not what's

880
00:45:05.154 --> 00:45:07.059
most important for the stream,

881
00:45:07.060 --> 00:45:08.158
so it was important for the

882
00:45:08.158 --> 00:45:09.380
streams and you might have alluded

883
00:45:09.380 --> 00:45:10.276
to this little earlier.

884
00:45:10.280 --> 00:45:12.120
It was just the absolute.

885
00:45:12.120 --> 00:45:15.008
Value of of the water that's being removed,

886
00:45:15.010 --> 00:45:15.260
right?

887
00:45:18.230 --> 00:45:19.985
What's important to the streams

888
00:45:19.985 --> 00:45:22.565
is that water that is taken from

889
00:45:22.565 --> 00:45:24.827
them be put to reasonable best

890
00:45:24.827 --> 00:45:28.680
beneficial uses and not wasted. Uhm?

891
00:45:31.230 --> 00:45:35.395
And the quantities of water being wasted.

892
00:45:35.400 --> 00:45:39.320
Or would be able to provide

893
00:45:39.320 --> 00:45:41.056
substantial benefits otherwise to

894
00:45:41.056 --> 00:45:43.660
the public trust purposes of the

895
00:45:43.660 --> 00:45:45.584
streams that are being dewatered.

896
00:45:45.584 --> 00:45:47.840
But but the current trajectory is

897
00:45:47.905 --> 00:45:50.222
that the amount of water that's being

898
00:45:50.222 --> 00:45:52.396
taken from the streams is multitudes

899
00:45:52.396 --> 00:45:54.727
less than what it used to be.

900
00:45:54.730 --> 00:45:57.467
Taken right. Mr Show Mr can I?

901
00:45:57.470 --> 00:45:58.946
Can I just pause here I?

902
00:45:58.950 --> 00:46:01.587
I think this was all covered in the trial.

903
00:46:01.590 --> 00:46:02.092
Is there?

904
00:46:02.092 --> 00:46:03.347
Is there something new that

905
00:46:03.347 --> 00:46:04.660

you're trying to cover here?

906
00:46:07.480 --> 00:46:08.838
I can move on. I mean I.

907
00:46:08.840 --> 00:46:11.745
I think that you know I I have

908
00:46:11.745 --> 00:46:13.436
a question while we're on this

909
00:46:13.436 --> 00:46:15.342
topic and that is Mr Tanaka,

910
00:46:15.342 --> 00:46:18.149
I think you you said that they

911
00:46:18.149 --> 00:46:20.979
should invest in improvements to

912
00:46:20.979 --> 00:46:23.904
reduce seepage and evaporation which.

913
00:46:23.910 --> 00:46:25.606
Again, I think we covered in the trial,

914
00:46:25.610 --> 00:46:29.180
but we had earlier discussion about fire.

915
00:46:31.310 --> 00:46:35.636
Availability of water in reservoirs for fire.

916
00:46:35.640 --> 00:46:40.323
Uhm, by both. To fight fires

917
00:46:40.323 --> 00:46:43.678
using helicopters in buckets etc.

918
00:46:43.680 --> 00:46:46.344
With Maui police and Division of

919
00:46:46.344 --> 00:46:49.819
Forestry and wildlife. So is there?

920
00:46:49.820 --> 00:46:51.988
Ah, I I'm not sure what you're thinking

921
00:46:51.988 --> 00:46:54.060
about to reduce evapotranspiration.

922
00:46:54.060 --> 00:46:55.360
But are you thinking about

923
00:46:55.360 --> 00:46:56.660
a cover on a reservoir?

924
00:46:56.660 --> 00:47:00.440
And I'm curious about what that would do for.

925
00:47:00.440 --> 00:47:02.924
The availability of water and fighting

926
00:47:02.924 --> 00:47:04.735
fires and I I want to note for the record,

927
00:47:04.740 --> 00:47:07.610
miss DNA entered the the meeting room.

928
00:47:10.770 --> 00:47:13.350
Odd so.

929
00:47:17.050 --> 00:47:21.420
I, I mean I I I can't I I can't

930
00:47:21.563 --> 00:47:24.185
talk to like how like I mean

931
00:47:24.185 --> 00:47:25.493
you could potentially engineer.

932
00:47:25.500 --> 00:47:28.050

Ways to cover. As wars, uh,

933
00:47:28.050 --> 00:47:30.750
that would still allow access for,

934
00:47:30.750 --> 00:47:35.060
say, helicopter. Come, you know,

935
00:47:35.060 --> 00:47:36.535
collection of water you could

936
00:47:36.535 --> 00:47:38.010
designate certain reservoirs to be

937
00:47:38.063 --> 00:47:39.680
covered and some to not be covered,

938
00:47:39.680 --> 00:47:40.708
but you know. Again,

939
00:47:40.708 --> 00:47:42.250
aligning them is important so that

940
00:47:42.299 --> 00:47:44.027
the water you know remains available.

941
00:47:46.240 --> 00:47:47.660
I mean, there's you know,

942
00:47:47.660 --> 00:47:49.604
manage setting is from the earlier

943
00:47:49.604 --> 00:47:51.276
testimony was that there is

944
00:47:51.276 --> 00:47:53.748
something like 9 or so reservoirs

945
00:47:53.748 --> 00:47:56.188
that have been used in 2021.

946
00:47:56.188 --> 00:47:58.540
You don't have to cover all of them,

947
00:47:58.540 --> 00:48:00.376
but you know it covers start,

948
00:48:00.380 --> 00:48:02.120
start somewhere, cover some of them,

949
00:48:02.120 --> 00:48:04.700
line some of them.

950
00:48:04.700 --> 00:48:07.340
You know the.

951
00:48:07.340 --> 00:48:09.184
These are reasonable investments,

952
00:48:09.184 --> 00:48:10.106
considering that.

953
00:48:12.230 --> 00:48:15.646
These the the version of water under temp.

954
00:48:15.650 --> 00:48:17.860
So-called temporary vocable permits, has

955
00:48:17.860 --> 00:48:20.480
been ongoing continuously since the 1980s.

956
00:48:27.730 --> 00:48:29.155
To begin, the process of

957
00:48:29.155 --> 00:48:31.069
investing in in, you know, I'm.

958
00:48:31.069 --> 00:48:32.481
I'm specifically wondering about

959
00:48:32.481 --> 00:48:34.690

how you make sure water is available

960
00:48:34.690 --> 00:48:37.044
in the in the chaos of fighting a

961
00:48:37.044 --> 00:48:38.944
fire without having to, you know,

962
00:48:38.944 --> 00:48:42.070
roll back, atop, or check to see which

963
00:48:42.070 --> 00:48:44.710
reservoirs have water in them or.

964
00:48:44.710 --> 00:48:45.610
Or that kind of thing?

965
00:48:45.610 --> 00:48:46.990
Do you have any?

966
00:48:46.990 --> 00:48:48.025
Thoughts on that?

967
00:48:50.650 --> 00:48:55.108
Uh, so I don't know. I don't.

968
00:48:55.108 --> 00:48:58.740
Think that we even know how much water

969
00:48:58.846 --> 00:49:02.620
needs to be available for firefighting.

970
00:49:02.620 --> 00:49:05.334
I feel like that was a condition that

971
00:49:05.334 --> 00:49:10.150
the board imposed that was not fulfilled.

972
00:49:10.150 --> 00:49:11.610
So not knowing that quantity,

973
00:49:11.610 --> 00:49:14.518
it's hard to say.

974
00:49:14.520 --> 00:49:15.968
You would have to know once you know

975
00:49:15.968 --> 00:49:17.418
the colony then you can figure out

976
00:49:17.418 --> 00:49:18.761
what reservoirs you might want to

977
00:49:18.761 --> 00:49:19.781
designate as firefighting reservoirs

978
00:49:19.781 --> 00:49:21.480
and make sure that they're easily

979
00:49:21.480 --> 00:49:23.160
accessible in whatever manner,

980
00:49:23.160 --> 00:49:25.350
while also ensuring that they're not.

981
00:49:25.350 --> 00:49:27.366
You know losing millions of gallons

982
00:49:27.366 --> 00:49:32.070
of water per day come into the ground.

983
00:49:32.070 --> 00:49:34.878
OK, thank you alright Mr Schulmeister,

984
00:49:34.880 --> 00:49:37.470
please continue.

985
00:49:37.470 --> 00:49:39.920
Yeah, I'm not gonna be much longer,

986
00:49:39.920 --> 00:49:41.656

so is it the circles position at all

987
00:49:41.656 --> 00:49:42.922
earthen dam reservoirs instead of

988
00:49:42.922 --> 00:49:44.756
why you should be lined and covered?

989
00:49:47.690 --> 00:49:54.358
If there. Uh. If streams are being,

990
00:49:54.358 --> 00:49:57.520
if the water to water stick in all

991
00:49:57.520 --> 00:49:59.645
of the watershed and deposited

992
00:49:59.645 --> 00:50:01.989
into reservoirs in the order of,

993
00:50:01.990 --> 00:50:04.251
you know over 10 million gallons water

994
00:50:04.251 --> 00:50:06.776
per day and that water is not used,

995
00:50:06.780 --> 00:50:08.355
I think it's fair to say that

996
00:50:08.355 --> 00:50:09.995
our position is that water is

997
00:50:09.995 --> 00:50:11.520
wasted and therefore that's in

998
00:50:11.520 --> 00:50:13.029
contravention to the public trust.

999
00:50:13.030 --> 00:50:17.550
So, like True Lake Wilson the.

1000
00:50:17.550 --> 00:50:19.958
Covered in line in order to prevent

1001
00:50:19.958 --> 00:50:21.750
seepage and evaporation from the

1002
00:50:21.750 --> 00:50:23.850
streams that contribute to Lake Wilson,

1003
00:50:23.850 --> 00:50:25.458
the reservoir in Wahiawa.

1004
00:50:28.280 --> 00:50:31.976
We have to look at the.

1005
00:50:31.980 --> 00:50:33.460
Public trusts and reasonable

1006
00:50:33.460 --> 00:50:35.680
beneficial uses of the water that's

1007
00:50:35.742 --> 00:50:37.512
deposited there to make that make

1008
00:50:37.512 --> 00:50:39.620
an analysis as to whether that's.

1009
00:50:39.620 --> 00:50:43.320
You know an appropriate situation.

1010
00:50:43.320 --> 00:50:45.154
Or what about the the reservoirs that

1011
00:50:45.154 --> 00:50:47.557
the new one with the Department of Water

1012
00:50:47.557 --> 00:50:49.650
Supply for Oahu maintains and operates?

1013
00:50:49.650 --> 00:50:52.018

Should they be covered?

1014
00:50:52.020 --> 00:50:54.755
So the public trust action

1015
00:50:54.755 --> 00:50:56.938
requires specific analysis, right?

1016
00:50:56.938 --> 00:50:59.090
Like the the people.

1017
00:50:59.090 --> 00:51:00.232
The versions,

1018
00:51:00.232 --> 00:51:03.087
particularly that benefit private entities.

1019
00:51:05.840 --> 00:51:07.904
They need to be.

1020
00:51:07.904 --> 00:51:09.968
The justification needs to

1021
00:51:09.968 --> 00:51:12.269
be quantified and balanced,

1022
00:51:12.270 --> 00:51:13.654
and so it's a case by case analysis,

1023
00:51:13.660 --> 00:51:14.920
and that's what.

1024
00:51:14.920 --> 00:51:17.590
We've been asking for and that many

1025
00:51:17.590 --> 00:51:19.570
folks have been asking for with

1026
00:51:19.570 --> 00:51:21.620
regards to these are keys. Uhm?

1027
00:51:23.630 --> 00:51:25.770
Are you saying the UM,

1028
00:51:25.770 --> 00:51:27.989
'cause my hip bones are private entity,

1029
00:51:27.990 --> 00:51:30.984
that the there's a different standard

1030
00:51:30.984 --> 00:51:33.480
that applies to whether reservoirs

1031
00:51:33.480 --> 00:51:35.827
need to be lined or covered?

1032
00:51:35.827 --> 00:51:37.609
And then it would for the

1033
00:51:37.609 --> 00:51:38.950
Department of Water Supply.

1034
00:51:41.840 --> 00:51:45.536
When a when a private entity.

1035
00:51:45.540 --> 00:51:48.800
Is takes public trust resources,

1036
00:51:48.800 --> 00:51:50.504
then there's a burden that the

1037
00:51:50.504 --> 00:51:52.916
Supreme Court has, you know,

1038
00:51:52.916 --> 00:51:56.028
stated has has established.

1039
00:51:56.030 --> 00:51:58.886
That puts it on us and them to

1040
00:51:58.886 --> 00:52:01.440

justify that division of of water.

1041
00:52:04.720 --> 00:52:06.640
Is the groundwater that's contained

1042
00:52:06.640 --> 00:52:09.200
moissac refers of public trust resources?

1043
00:52:09.200 --> 00:52:11.540
All waterways public history

1044
00:52:11.540 --> 00:52:13.880
says so that includes.

1045
00:52:13.880 --> 00:52:15.900
The water contained groundwater aquifers,

1046
00:52:15.900 --> 00:52:18.090
right? Yes, and in fact,

1047
00:52:18.090 --> 00:52:19.300
I think the Sierra Club,

1048
00:52:19.300 --> 00:52:23.085
very noticeably active in trying to

1049
00:52:23.085 --> 00:52:25.890
protect aquifers in Oahu from fuel

1050
00:52:25.890 --> 00:52:30.120
contamination at Red Hill, correct?

1051
00:52:30.120 --> 00:52:33.312
Now is this is surface water the surface

1052
00:52:33.312 --> 00:52:35.920
water that's imported from East Maui

1053
00:52:35.920 --> 00:52:37.300
that seeps into the central Maui,

1054
00:52:37.300 --> 00:52:39.880
aquifers at karma, those aquifers.

1055
00:52:39.880 --> 00:52:40.890
Is it? What is actress?

1056
00:52:40.890 --> 00:52:43.392
Sorry, but there's water from streams

1057
00:52:43.392 --> 00:52:47.030
and East Maui that's imported.

1058
00:52:47.030 --> 00:52:50.540
To central Maui and seeps.

1059
00:52:50.540 --> 00:52:52.300
On the reservoirs into the

1060
00:52:52.300 --> 00:52:53.356
central Maui aquifers.

1061
00:52:53.360 --> 00:52:55.410
Is that harming those aquifers?

1062
00:52:57.880 --> 00:53:04.670
So. Public trust doctrine requires that

1063
00:53:04.670 --> 00:53:07.912
the water be part whatever uses be

1064
00:53:07.912 --> 00:53:09.680
prioritized for certain things, right?

1065
00:53:09.680 --> 00:53:10.640
So, public trust purposes,

1066
00:53:10.640 --> 00:53:12.313
one of which is the maintenance of

1067
00:53:12.313 --> 00:53:14.027

waters in the in a natural state.

1068
00:53:16.260 --> 00:53:20.928
So diverting and dividing streams is.

1069
00:53:20.930 --> 00:53:22.844
In direct contradiction to one of

1070
00:53:22.844 --> 00:53:24.914
the four public trust purposes of

1071
00:53:24.914 --> 00:53:26.739
identified by the Supreme Court.

1072
00:53:26.740 --> 00:53:29.230
Yeah, my question is whether water

1073
00:53:29.230 --> 00:53:32.780
that seeps into the aquifer in

1074
00:53:32.780 --> 00:53:35.223
Central Maui from the reservoirs.

1075
00:53:35.223 --> 00:53:37.512
I'm asking you whether you've already,

1076
00:53:37.512 --> 00:53:40.880
you know, indicated that it's a public trust,

1077
00:53:40.880 --> 00:53:43.246
reason to aquifers or public trust resources,

1078
00:53:43.250 --> 00:53:45.274
and I'm just what I'm asking you is

1079
00:53:45.274 --> 00:53:47.385
whether water that seeps into them from

1080
00:53:47.385 --> 00:53:50.475
the reservoir is whether that's harming.

1081
00:53:50.480 --> 00:53:53.504
That's my question, is it harming them?

1082
00:53:53.510 --> 00:53:54.206
Uh, I can't.

1083
00:53:54.206 --> 00:53:56.757
I can't see how that and if I mean I don't,

1084
00:53:56.760 --> 00:53:59.768
I don't know the hydrogeology and whether it.

1085
00:53:59.770 --> 00:54:04.146
You know, uh, how it may impact the.

1086
00:54:04.150 --> 00:54:07.186
Uh. You know the whatever,

1087
00:54:07.186 --> 00:54:08.531
whatever situation is down under

1088
00:54:08.531 --> 00:54:10.254
under the ground, in central Mali.

1089
00:54:10.254 --> 00:54:12.242
I mean, certainly not like leeching

1090
00:54:12.242 --> 00:54:14.300
fuel into these actors is not

1091
00:54:14.365 --> 00:54:17.690
hiring in that sense, right?

1092
00:54:17.690 --> 00:54:19.699
Sure, water isn't as bad as fuel,

1093
00:54:19.700 --> 00:54:19.969
right?

1094
00:54:19.969 --> 00:54:22.121

And does it in fact benefit the ACH

1095
00:54:22.121 --> 00:54:23.927
refers to beginning some recharge.

1096
00:54:26.360 --> 00:54:27.340
Sure, but you have to.

1097
00:54:27.340 --> 00:54:28.441
You have potentially,

1098
00:54:28.441 --> 00:54:31.479
but you have to also consider you know

1099
00:54:31.479 --> 00:54:33.837
balance benefits to central model with

1100
00:54:33.837 --> 00:54:36.460
the need for warranty simile, right?

1101
00:54:36.460 --> 00:54:37.588
So it's a lot of factors that have

1102
00:54:37.588 --> 00:54:39.268
to be considered, right? Sure.

1103
00:54:39.268 --> 00:54:42.656
And the you familiar with the submittal

1104
00:54:42.656 --> 00:54:45.913
to staff submittal for the November

1105
00:54:45.913 --> 00:54:48.619
13th meeting when it talks about.

1106
00:54:48.620 --> 00:54:51.305
The effect of pumping groundwater

1107
00:54:51.305 --> 00:54:53.990
from central Maui for agriculture.

1108
00:54:53.990 --> 00:54:56.830
Do you recall that discussion?

1109
00:54:56.830 --> 00:54:59.070
Yes, exhibit Y 22.

1110
00:54:59.070 --> 00:55:03.220
Uh, yeah, I'm somewhat familiar with.

1111
00:55:03.220 --> 00:55:07.650
They are sorry. It's coming.

1112
00:55:07.650 --> 00:55:09.606
I'm on page 14 and this

1113
00:55:09.606 --> 00:55:11.470
is the document I don't.

1114
00:55:11.470 --> 00:55:13.934
Not sure if that matches fee PDF,

1115
00:55:13.940 --> 00:55:18.189
but exactly why 22 on page 14.

1116
00:55:18.190 --> 00:55:22.096
Come in the second full paragraph.

1117
00:55:22.100 --> 00:55:23.876
Uh, there's a discussion about that.

1118
00:55:23.880 --> 00:55:24.606
Do you see?

1119
00:55:24.606 --> 00:55:27.050
Can we share that so we can look at it?

1120
00:55:29.080 --> 00:55:31.910
Exhibit Y 22 page 14.

1121
00:55:54.090 --> 00:55:56.670

And I'd like to direct

1122
00:55:56.670 --> 00:55:58.218
attention specifically to.

1123
00:55:58.220 --> 00:56:00.326
The second half of that paragraph.

1124
00:56:02.970 --> 00:56:05.140
Which program? This is the

1125
00:56:05.140 --> 00:56:07.620
second full paragraph on page 14,

1126
00:56:07.620 --> 00:56:11.388
so it first starts by saying.

1127
00:56:11.390 --> 00:56:12.980
See WRM you see that.

1128
00:56:18.410 --> 00:56:18.920
Yes.

1129
00:56:21.150 --> 00:56:24.180
Yeah, it's talking about the the.

1130
00:56:26.490 --> 00:56:29.070
It's on the fourth line.

1131
00:56:29.070 --> 00:56:29.982
There's a sentence starts

1132
00:56:29.982 --> 00:56:31.350
near the right of the page,

1133
00:56:31.350 --> 00:56:33.690
according to comments from sea Worms,

1134
00:56:33.690 --> 00:56:35.402
Groundwater Division, Central Maui,

1135
00:56:35.402 --> 00:56:37.970
or the Kahoo Louis Aquifer system

1136
00:56:38.038 --> 00:56:39.578
area is estimated sustainable

1137
00:56:39.578 --> 00:56:41.503
yield of 1,000,000 gallons a

1138
00:56:41.503 --> 00:56:43.687
day based on natural conditions.

1139
00:56:43.690 --> 00:56:46.276
However, this does not include the

1140
00:56:46.276 --> 00:56:48.700
historic or continued importation of water

1141
00:56:48.700 --> 00:56:50.919
from both EMI and White local water,

1142
00:56:50.920 --> 00:56:52.616
which historically exceeded an

1143
00:56:52.616 --> 00:56:55.160
average of 200 MGD and undoubtedly

1144
00:56:55.225 --> 00:56:56.659
contributes to return.

1145
00:56:56.660 --> 00:56:58.488
Irrigation recharge a very

1146
00:56:58.488 --> 00:56:59.859
low salinity water?

1147
00:56:59.860 --> 00:57:00.310
You see that.

1148
00:57:02.460 --> 00:57:03.700

And, uh.

1149
00:57:05.960 --> 00:57:07.430
The groundwater in the area

1150
00:57:07.430 --> 00:57:08.606
is not overly brackish.

1151
00:57:08.610 --> 00:57:10.224
Actually quite good to the point

1152
00:57:10.224 --> 00:57:11.904
where the county is relying on

1153
00:57:11.904 --> 00:57:13.605
some wells for potable needs.

1154
00:57:13.605 --> 00:57:18.280
Do you see that? Yes, so.

1155
00:57:18.280 --> 00:57:19.452
And there's other wells

1156
00:57:19.452 --> 00:57:20.624
that share these aquifers.

1157
00:57:20.630 --> 00:57:22.534
Besides those that are

1158
00:57:22.534 --> 00:57:25.880
available to my portal, correct?

1159
00:57:25.880 --> 00:57:28.232
Yes, I think so.

1160
00:57:28.232 --> 00:57:32.540
Yeah and so. Uh.

1161
00:57:35.090 --> 00:57:40.928
Water seeping in to these aquifers.

1162
00:57:40.930 --> 00:57:43.980
Which are public trust resource?

1163
00:57:43.980 --> 00:57:47.730
Benefits them, right? I don't know.

1164
00:57:47.730 --> 00:57:49.830
I don't know what the hydrogen

1165
00:57:49.830 --> 00:57:51.812
hydrogeology looks like under under the

1166
00:57:51.812 --> 00:57:54.479
ground like we must arrangements that.

1167
00:57:54.479 --> 00:57:57.917
That would affect the benefit if

1168
00:57:57.917 --> 00:58:00.821
any of recharge through seepage,

1169
00:58:00.821 --> 00:58:03.287
but that but that is relevant

1170
00:58:03.287 --> 00:58:05.494
to the balancing that should

1171
00:58:05.494 --> 00:58:07.286
be taking place correct?

1172
00:58:07.290 --> 00:58:08.290
Sure, but we don't know.

1173
00:58:08.290 --> 00:58:09.767
So it's going to be hard to

1174
00:58:09.767 --> 00:58:11.120
factor that into the balancing.

1175
00:58:13.600 --> 00:58:14.890

I don't have any further questions.

1176
00:58:19.590 --> 00:58:22.440
Cape Maui County.

1177
00:58:22.440 --> 00:58:23.688
I have no questions for this

1178
00:58:23.688 --> 00:58:25.484
witness, thank you right.

1179
00:58:25.484 --> 00:58:27.170
Mr Frankel, thank you.

1180
00:58:33.900 --> 00:58:35.514
Mr. Tanaka, you've had a pretty

1181
00:58:35.514 --> 00:58:38.570
busy couple of weeks, haven't you?

1182
00:58:38.570 --> 00:58:41.859
Yeah, I'd say so Mr. Schulmeister.

1183
00:58:41.859 --> 00:58:44.133
I mentioned something about the Sierra

1184
00:58:44.133 --> 00:58:45.790
Club's involvement in Red Hill.

1185
00:58:45.790 --> 00:58:48.050
Is it taking up a bit of your time this

1186
00:58:48.114 --> 00:58:53.068
past past couple weeks? Uh, yes and.

1187
00:58:53.070 --> 00:58:56.139
What up Sierra Club involved in a couple of

1188
00:58:56.139 --> 00:58:58.666
contested case hearings regarding Red Hill?

1189
00:58:58.670 --> 00:59:01.806
Yes and dumb. Uh, those hearings are

1190
00:59:01.806 --> 00:59:05.730
for the Department of Health, right?

1191
00:59:05.730 --> 00:59:09.657
Correct, was IT department of Health up

1192
00:59:09.660 --> 00:59:13.161
on the Sierra Club side on in terms of

1193
00:59:13.161 --> 00:59:17.180
the need to take drastic action regarding?

1194
00:59:17.180 --> 00:59:19.196
The Navy's activities at Red Hill before

1195
00:59:19.196 --> 00:59:20.799
the contested case hearing began.

1196
00:59:20.800 --> 00:59:23.800
The first contested case hearing.

1197
00:59:23.800 --> 00:59:29.250
Uh, the. Not necessarily.

1198
00:59:29.250 --> 00:59:31.100
Has the department health attitude

1199
00:59:31.100 --> 00:59:32.950
changed somewhat since the Red

1200
00:59:33.012 --> 00:59:34.947
Hill contested case hearing began?

1201
00:59:34.950 --> 00:59:38.690
Yes, OK, thank you.

1202
00:59:38.690 --> 00:59:40.508

Hope that's the case in this one as well,

1203
00:59:40.510 --> 00:59:43.063
I see. Mr.

1204
00:59:43.063 --> 00:59:45.378
Schulmeister was asking about water

1205
00:59:45.378 --> 00:59:48.345
that seeps into the ground. Mr.

1206
00:59:48.345 --> 00:59:51.740
Tucker, how much of the water that?

1207
00:59:51.740 --> 00:59:54.740
Seeps into the ground and West

1208
00:59:54.740 --> 00:59:56.240
in central Maui.

1209
00:59:56.240 --> 00:59:58.885
Actually both reaches the aquifer

1210
00:59:58.885 --> 01:00:01.530
and stays in the aquifer.

1211
01:00:01.530 --> 01:00:04.050
I've no idea.

1212
01:00:04.050 --> 01:00:05.730
Any evidence you've been listening to?

1213
01:00:05.730 --> 01:00:07.962
Almost all this contested case hearing

1214
01:00:07.962 --> 01:00:10.197
has any evidence been presented at

1215
01:00:10.197 --> 01:00:12.243
all that discuss is what percentage

1216
01:00:12.243 --> 01:00:14.786
of the water that actually seeps into

1217
01:00:14.786 --> 01:00:17.090
the ground both reaches the aquifer

1218
01:00:17.090 --> 01:00:20.090
and stays there for future use.

1219
01:00:20.090 --> 01:00:23.386
I have not. I've not heard of any.

1220
01:00:23.390 --> 01:00:24.880
OK, uhm.

1221
01:00:28.150 --> 01:00:31.666
Do you know if Lake Wilson?

1222
01:00:31.670 --> 01:00:32.828
I think that's that's like Wilson,

1223
01:00:32.830 --> 01:00:36.099
the name that lake in in Wahiawa.

1224
01:00:36.100 --> 01:00:40.480
Yeah, the current yeah OK so.

1225
01:00:40.480 --> 01:00:44.449
Do Lake Wilson and the Board of

1226
01:00:44.449 --> 01:00:47.368
Water Supplies Reservoir in new one?

1227
01:00:47.370 --> 01:00:50.408
Do they get their water from diverting

1228
01:00:50.408 --> 01:00:53.420
and completely do watering any streams?

1229
01:00:53.420 --> 01:00:54.460

But I don't, I'm not,

1230
01:00:54.460 --> 01:00:56.836
I don't think so.

1231
01:00:56.836 --> 01:00:59.380
Alright. Alright.

1232
01:00:59.380 --> 01:01:01.627
OK, I want to turn your attention

1233
01:01:01.627 --> 01:01:03.832
now to the Water Commission's

1234
01:01:03.832 --> 01:01:07.388
decision that Mr Schulmeister whoops.

1235
01:01:10.230 --> 01:01:16.580
Uhm? Put up for you come and I

1236
01:01:16.580 --> 01:01:19.940
wanna call your attention to this

1237
01:01:19.940 --> 01:01:22.600
exhibit Y46 and I want to turn

1238
01:01:22.600 --> 01:01:24.243
your attention to paragraph 737.

1239
01:01:24.243 --> 01:01:26.187
Do you see that there on your screen?

1240
01:01:26.190 --> 01:01:28.234
Yes. So let me read and tell

1241
01:01:28.234 --> 01:01:30.540
me if I've read it correctly.

1242
01:01:30.540 --> 01:01:34.830
Thus, 8 CNS system losses of 22%.

1243
01:01:36.930 --> 01:01:38.018
41.67 million gallons of

1244
01:01:40.050 --> 01:01:41.244
183.61 million gallons.

1245
01:01:41.244 --> 01:01:42.836
Per day of surface,

1246
01:01:42.840 --> 01:01:45.330
water diverted and groundwater pumped.

1247
01:01:45.330 --> 01:01:47.418
Were reasonable losses under

1248
01:01:47.418 --> 01:01:48.984
sugar cane cultivation.

1249
01:01:48.990 --> 01:01:50.930
Because the same distribution system

1250
01:01:50.930 --> 01:01:53.640
would be used for diversified agriculture,

1251
01:01:53.640 --> 01:01:58.100
the same rate of 22.7% losses should

1252
01:01:58.100 --> 01:02:00.332
be applicable. Do you see that?

1253
01:02:00.332 --> 01:02:02.890
Yes, I read, did I read that correctly?

1254
01:02:02.890 --> 01:02:05.458
Yes, do you see any footnote

1255
01:02:05.458 --> 01:02:07.730
there at all that says?

1256
01:02:07.730 --> 01:02:10.635

More than this rate can be lost.

1257
01:02:10.640 --> 01:02:13.559
Up until the land is fully cultivated,

1258
01:02:13.560 --> 01:02:15.582
is there a footnote like that

1259
01:02:15.582 --> 01:02:18.167
there I I do not see any footnote,

1260
01:02:18.170 --> 01:02:19.619
and as far as you know did.

1261
01:02:19.620 --> 01:02:22.572
I'm did Alexander Baldwin as far as you know,

1262
01:02:22.580 --> 01:02:24.950
did they appeal the Water

1263
01:02:24.950 --> 01:02:25.898
Commission's decision?

1264
01:02:25.900 --> 01:02:28.716
Uh, my recollection was that they did not,

1265
01:02:28.720 --> 01:02:32.518
so if they were unhappy about.

1266
01:02:32.520 --> 01:02:35.034
This finding 737 and its and

1267
01:02:35.034 --> 01:02:37.790
its use of the word rate.

1268
01:02:37.790 --> 01:02:38.640
They could have done so,

1269
01:02:38.640 --> 01:02:40.512
but they didn't, right?

1270
01:02:40.512 --> 01:02:41.964
Uh, I guess yeah,

1271
01:02:41.964 --> 01:02:43.276
they I guess not.

1272
01:02:43.280 --> 01:02:44.972
OK so I want to talk to you a

1273
01:02:44.972 --> 01:02:46.725
little bit about this this a little

1274
01:02:46.725 --> 01:02:48.310
bit more about this paragraph.

1275
01:02:48.310 --> 01:02:50.734
Now I know that Mr Schulmeister

1276
01:02:50.734 --> 01:02:53.350
asked you about being an engineer,

1277
01:02:53.350 --> 01:02:55.390
but I think I want to go back

1278
01:02:55.390 --> 01:02:56.709
to lower level math.

1279
01:02:56.710 --> 01:03:00.310
You went to what high school did you go to?

1280
01:03:00.310 --> 01:03:02.898
I went to put a whole uh along

1281
01:03:02.898 --> 01:03:04.782
with several other people in this

1282
01:03:04.782 --> 01:03:06.540
proceeding or or their offspring,

1283
01:03:06.540 --> 01:03:08.214

and at Punahou.

1284
01:03:08.214 --> 01:03:11.562
Did you learn about the words

1285
01:03:11.570 --> 01:03:14.590
or the concepts of percentage

1286
01:03:14.590 --> 01:03:17.006
and rate and fractions?

1287
01:03:17.010 --> 01:03:19.610
Yes.

1288
01:03:19.610 --> 01:03:22.285
All essentially equivalent terms of

1289
01:03:22.285 --> 01:03:25.470
percentage of fraction and a rate.

1290
01:03:27.660 --> 01:03:31.932
Yeah, sure, yes. So what happens when

1291
01:03:31.932 --> 01:03:35.155
you have a percentage of fraction or

1292
01:03:35.155 --> 01:03:37.635
rate when the denominator increases?

1293
01:03:37.640 --> 01:03:39.230
What happens to the numerator?

1294
01:03:43.440 --> 01:03:46.107
You mean what happens to the rate?

1295
01:03:46.110 --> 01:03:47.742
No, no, no. So if you're keeping the

1296
01:03:47.742 --> 01:03:49.345
rate the same, sorry. Good point.

1297
01:03:49.345 --> 01:03:51.825
Very good point if you're keeping the rate

1298
01:03:51.825 --> 01:03:53.827
the same and you're using a fraction.

1299
01:03:53.830 --> 01:03:55.318
If the denominator increases,

1300
01:03:55.318 --> 01:03:58.478
what has to happen to the numerator?

1301
01:03:58.478 --> 01:04:01.526
Also increase and if the denominator

1302
01:04:01.526 --> 01:04:03.238
decreases. If you're using a

1303
01:04:03.238 --> 01:04:04.466
rate percentage of fraction,

1304
01:04:04.470 --> 01:04:07.850
what happens to the numerator decreases. OK,

1305
01:04:07.850 --> 01:04:15.090
so if my if and B is taking less water now.

1306
01:04:15.090 --> 01:04:16.838
As an absolute number,

1307
01:04:16.838 --> 01:04:19.930
the number that they're allowed to lose,

1308
01:04:19.930 --> 01:04:22.100
would that increase or decrease?

1309
01:04:22.100 --> 01:04:23.456
Decrease would be less,

1310
01:04:23.456 --> 01:04:26.690

but the rate stays the same, right?

1311
01:04:26.690 --> 01:04:31.840
Correct, OK. Come now.

1312
01:04:31.840 --> 01:04:34.135
Uh, I, I know you've been really busy with

1313
01:04:34.135 --> 01:04:36.335
the Red Hill matter last couple weeks.

1314
01:04:36.340 --> 01:04:41.116
Do you recall what the Water

1315
01:04:41.116 --> 01:04:44.300
Commission decided was inappropriate?

1316
01:04:44.300 --> 01:04:47.220
Amount of loss or yeah,

1317
01:04:47.220 --> 01:04:52.456
amount of loss that Mahi Pono could.

1318
01:04:52.460 --> 01:04:55.910
Had for irrigating its crops

1319
01:04:55.910 --> 01:04:59.250
on using navaja water. Mr.

1320
01:04:59.250 --> 01:05:01.509
Franco I I'm going to say the same thing.

1321
01:05:01.510 --> 01:05:03.574
Can you please come?

1322
01:05:03.574 --> 01:05:07.200
Make sure you're covering new material here.

1323
01:05:07.200 --> 01:05:10.644
I don't believe that decision was

1324
01:05:10.644 --> 01:05:13.376
reached during the trial. I don't.

1325
01:05:13.376 --> 01:05:15.120
I don't think they had this and I.

1326
01:05:15.120 --> 01:05:16.128
I mean we can look at the data

1327
01:05:16.128 --> 01:05:16.720
in the decision,

1328
01:05:16.720 --> 01:05:18.472
but I'm pretty sure it came

1329
01:05:18.472 --> 01:05:19.640
out after August 20.

1330
01:05:19.640 --> 01:05:21.506
I'm talking about the whole discussion

1331
01:05:21.506 --> 01:05:24.256
of the sea worm decision in 2018 are you.

1332
01:05:24.260 --> 01:05:25.580
Are you done with that?

1333
01:05:25.580 --> 01:05:29.477
I've just my question that I just asked was.

1334
01:05:29.480 --> 01:05:30.532
Whether Mr.

1335
01:05:30.532 --> 01:05:33.688
Tanaka was aware of the Water

1336
01:05:33.688 --> 01:05:35.698
Commission's decision regarding the

1337
01:05:35.698 --> 01:05:39.051

amount of water that could be wasted

1338
01:05:39.051 --> 01:05:42.016
using the NAA water and that rate,

1339
01:05:42.020 --> 01:05:44.288
and if you if you don't recall Mr.

1340
01:05:44.288 --> 01:05:47.168
Tanaka, that's fine, but do you remember?

1341
01:05:47.170 --> 01:05:48.174
Uh, no,

1342
01:05:48.174 --> 01:05:51.688
but in this exhibit that's on the

1343
01:05:51.688 --> 01:05:55.021
screen 734 it's talks about 5% losses

1344
01:05:55.021 --> 01:05:57.176
as equivalent 5% regulation requirements.

1345
01:05:59.310 --> 01:06:01.998
Well, that's the the is that.

1346
01:06:04.160 --> 01:06:11.940
Good point, good point now. Finally. Scream.

1347
01:06:14.850 --> 01:06:19.800
Do we know which reservoirs both

1348
01:06:19.800 --> 01:06:23.810
dofe or the fire department has used?

1349
01:06:23.810 --> 01:06:25.954
Would like to use?

1350
01:06:25.954 --> 01:06:30.270
Come to fight fires in Central Mountain.

1351
01:06:30.270 --> 01:06:32.970
Uh, I I don't know.

1352
01:06:32.970 --> 01:06:36.006
Have you heard any evidence presented

1353
01:06:36.006 --> 01:06:38.792
by A&B in this contested case?

1354
01:06:38.792 --> 01:06:41.450
Hearing that discuss is which reservoirs

1355
01:06:41.526 --> 01:06:43.798
need to have water in them so that

1356
01:06:43.798 --> 01:06:47.708
we can fight fires I don't recall.

1357
01:06:47.710 --> 01:06:51.718
Thank you, I don't have any more questions.

1358
01:06:51.720 --> 01:06:54.646
Hey are we done with Mr Tanaka?

1359
01:06:57.460 --> 01:06:59.446
I don't have any further questions.

1360
01:06:59.450 --> 01:07:01.630
OK, all right Mr Tanaka.

1361
01:07:01.630 --> 01:07:03.218
Thank you very much.

1362
01:07:03.218 --> 01:07:07.870
Appreciate all your time this morning.

1363
01:07:07.870 --> 01:07:09.574
And you're free to stay and

1364
01:07:09.574 --> 01:07:11.150

just turn off your video.

1365
01:07:11.150 --> 01:07:14.811
But Mr Frankel, you wanted to take

1366
01:07:14.811 --> 01:07:18.540
a 10 minute recess and decide.

1367
01:07:18.540 --> 01:07:20.480
Uh, about your next witness,

1368
01:07:20.480 --> 01:07:23.198
who is available at 2:00 o'clock?

1369
01:07:23.200 --> 01:07:24.346
Let's let's let's.

1370
01:07:24.346 --> 01:07:27.620
Let's take a 10 minute 10 minute recess.

1371
01:07:27.620 --> 01:07:29.020
OK, so we'll come back.

1372
01:07:29.020 --> 01:07:30.928
Say around 10:20.

1373
01:07:30.928 --> 01:07:32.836
Thank you alright.

1374
01:18:51.440 --> 01:18:52.800
OK, I think we're back.

1375
01:18:52.800 --> 01:18:57.456
It's 1020 uh, and Mr Franco.

1376
01:18:57.460 --> 01:18:59.660
You're just going to let us know if you want

1377
01:18:59.715 --> 01:19:01.715
to call a witness this afternoon or not.

1378
01:19:01.720 --> 01:19:04.495
No need to thank you all right then.

1379
01:19:04.495 --> 01:19:07.790
That brings us to a close for today.

1380
01:19:07.790 --> 01:19:10.390
And so we're going to have a closing

1381
01:19:10.390 --> 01:19:13.510
arguments tomorrow at 9:00 AM, correct?

1382
01:19:13.510 --> 01:19:17.787
And and we agreed half hour each.

1383
01:19:17.790 --> 01:19:21.144
Up to 1/2 an hour each and so

1384
01:19:21.144 --> 01:19:23.293
will start at 9:00 AM will go.

1385
01:19:23.300 --> 01:19:26.462
Uh, yeah my MB and then

1386
01:19:26.462 --> 01:19:29.260
county and then Sierra Club.

1387
01:19:29.260 --> 01:19:31.000
And then that'll be it for

1388
01:19:31.000 --> 01:19:32.960
this part of this proceeding.

1389
01:19:32.960 --> 01:19:37.580
OK, great, anything else.

1390
01:19:37.580 --> 01:19:41.630
No. Any so you want.

1391
01:19:41.630 --> 01:19:42.920

The findings of fact conclusions

1392
01:19:42.920 --> 01:19:44.842
I don't know if we don't discuss

1393
01:19:44.842 --> 01:19:46.287
this today or or tomorrow,

1394
01:19:46.290 --> 01:19:48.530
but you want to find the fact

1395
01:19:48.530 --> 01:19:50.900
conclusions of law on by December 22nd,

1396
01:19:50.900 --> 01:19:51.344
right?

1397
01:19:51.344 --> 01:19:54.896
I don't remember what dates we talked about.

1398
01:19:54.900 --> 01:19:56.588
Does anybody have that?

1399
01:19:58.630 --> 01:20:01.054
It's one week after the last hearing day.

1400
01:20:01.060 --> 01:20:05.340
Alright, so that would be a next Wednesday.

1401
01:20:05.340 --> 01:20:08.878
So 21 and seven is. No,

1402
01:20:08.878 --> 01:20:12.062
the 22nd next week Wednesday is the 22nd.

1403
01:20:12.070 --> 01:20:14.980
OK, counting years OK?

1404
01:20:14.980 --> 01:20:16.540
And then what what's?

1405
01:20:16.540 --> 01:20:18.880
What's the thinking after that?

1406
01:20:21.240 --> 01:20:23.408
I am not sure, so we will recognize

1407
01:20:23.408 --> 01:20:26.065
her and maybe we can talk about it

1408
01:20:26.065 --> 01:20:28.060
after the closing arguments tomorrow.

1409
01:20:28.060 --> 01:20:33.230
Just to be clear on the next steps. OK, uhm.

1410
01:20:35.260 --> 01:20:37.808
It might make sense.

1411
01:20:37.808 --> 01:20:40.993
For us to either have.

1412
01:20:41.000 --> 01:20:44.040
Some sort of discussion after

1413
01:20:44.040 --> 01:20:47.810
Friday's court hearing, because, UM.

1414
01:20:47.810 --> 01:20:50.432
Well, I think it's fairly likely

1415
01:20:50.432 --> 01:20:53.558
that the deadline for the revocable

1416
01:20:53.558 --> 01:20:56.368
permit for the local permits.

1417
01:20:56.370 --> 01:20:59.114
I think are likely to be extended in

1418
01:20:59.114 --> 01:21:01.636

their time frame and it might make

1419
01:21:01.636 --> 01:21:04.986
some sense to talk about how we want to

1420
01:21:04.986 --> 01:21:07.266
proceed given that after the hearing.

1421
01:21:07.270 --> 01:21:08.158
Anyway, you can,

1422
01:21:08.158 --> 01:21:10.230
you can talk about all the implications

1423
01:21:10.284 --> 01:21:12.207
and we can maybe talk about that

1424
01:21:12.207 --> 01:21:14.720
tomorrow or think about setting up a

1425
01:21:14.796 --> 01:21:17.380
time when we all talk on Friday, OK?

1426
01:21:19.440 --> 01:21:21.582
Alright. We're good for the day then

1427
01:21:21.582 --> 01:21:23.588
I'm gonna turn off the recording

1428
01:21:23.590 --> 01:21:25.060
and we'll see you all tomorrow.

1429
01:21:25.060 --> 01:21:26.998
Have a good day. Thank you.