

1
00:00:03.190 --> 00:00:05.670
OK, good morning everyone.

2
00:00:08.350 --> 00:00:10.938
9:01 AM on December.

3
00:00:14.840 --> 00:00:15.670
13th, 2021.

4
00:00:18.240 --> 00:00:19.910
This is the contested case.

5
00:00:19.910 --> 00:00:22.398
Continuation of the contested

6
00:00:22.398 --> 00:00:25.680
case hearing for these polywater

7
00:00:25.680 --> 00:00:29.594
arpis for 2021 and the extent

8
00:00:29.594 --> 00:00:31.832
necessary and 2022 anyone need

9
00:00:31.832 --> 00:00:34.030
me to read the full title again.

10
00:00:34.030 --> 00:00:37.570
Great, thank you. Uh.

11
00:00:37.570 --> 00:00:39.845
Yeah, and let's go ahead and have

12
00:00:39.845 --> 00:00:42.124
all the parties introduce themselves

13
00:00:42.124 --> 00:00:44.600
and your designated representatives

14
00:00:44.600 --> 00:00:47.948

and believe we have a court

15

00:00:47.948 --> 00:00:51.759
reporter for a BMI and we have.

16

00:00:51.760 --> 00:00:54.168
Witnesses and if I could ask everyone

17

00:00:54.168 --> 00:00:56.986
to just please turn on your video to

18

00:00:56.986 --> 00:00:59.036
do your introductions and then you

19

00:00:59.036 --> 00:01:03.700
can turn it back off OK and be in my.

20

00:01:03.700 --> 00:01:04.632
Good morning,

21

00:01:04.632 --> 00:01:06.962
Trisha Caughey and David Schulmeister

22

00:01:06.962 --> 00:01:09.371
appearing on behalf of A and B&MI

23

00:01:09.371 --> 00:01:11.837
with us today is Meredith Chang,

24

00:01:11.840 --> 00:01:13.862
who is our client representative and

25

00:01:13.862 --> 00:01:16.244
also from our office is Nicole Yamane

26

00:01:16.244 --> 00:01:18.519
who will be helping with the exhibits.

27

00:01:18.520 --> 00:01:20.896
Thank you very much and I

28

00:01:20.896 --> 00:01:22.480
neglected to introduce myself,

29

00:01:22.480 --> 00:01:24.540
Suzanne case acting as the

30

00:01:24.540 --> 00:01:25.776
hearing officer here.

31

00:01:25.780 --> 00:01:27.728
OK County of Maui.

32

00:01:32.860 --> 00:01:34.330
Caleb, we can't hear you.

33

00:01:53.000 --> 00:01:55.046
Linda Chow had to sign out

34

00:01:55.046 --> 00:01:56.970
and sign back in again.

35

00:01:56.970 --> 00:02:00.114
You could try it. I can't hear you.

36

00:02:00.120 --> 00:02:02.144
No, then the child just had the wrong

37

00:02:02.144 --> 00:02:03.649
computer that I was signing into.

38

00:02:08.060 --> 00:02:13.100
Now you muted yeah try. No no.

39

00:02:17.790 --> 00:02:22.860
Hello now yeah. Strange.

40

00:02:22.860 --> 00:02:24.725
Corporation counsel Caleb are on

41

00:02:24.725 --> 00:02:27.000

behalf of the County of Maui.

42

00:02:27.000 --> 00:02:28.980
And don't believe my.

43

00:02:28.980 --> 00:02:31.455
Witness has signed in yet,

44

00:02:31.460 --> 00:02:34.036
but Tony Linder will be appearing in

45

00:02:34.036 --> 00:02:37.320
this suit already kiss Sierra Club.

46

00:02:37.320 --> 00:02:38.590
Good morning.

47

00:02:38.590 --> 00:02:40.060
David Frankel, the Sierra Club,

48

00:02:40.060 --> 00:02:41.440
also with the Sierra Club here,

49

00:02:41.440 --> 00:02:44.408
today or Lucy and Danae and Wayne Tanaka.

50

00:02:44.410 --> 00:02:48.589
OK, thank you. And for for ages.

51

00:02:48.590 --> 00:02:50.660
A deputy Attorney General Linda Chow,

52

00:02:50.660 --> 00:02:53.980
deputy attorney General Lauren.

53

00:02:53.980 --> 00:02:56.048
John and Melissa Goldman

54

00:02:56.048 --> 00:02:58.116
are also in attendance.

55
00:02:58.120 --> 00:03:03.670
OK, and we have a let's see we have OK blue.

56
00:03:03.670 --> 00:03:06.498
For Dylan or Blue Book on here

57
00:03:06.498 --> 00:03:08.540
with Dylan Ireland division.

58
00:03:08.540 --> 00:03:10.109
OK and uhm.

59
00:03:10.109 --> 00:03:13.247
Lauren Chan is in the boardroom

60
00:03:13.247 --> 00:03:16.722
which we have made available for

61
00:03:16.722 --> 00:03:19.508
public viewing of the hearing.

62
00:03:19.508 --> 00:03:23.572
I don't believe we have anybody here today.

63
00:03:23.580 --> 00:03:27.700
Uhm? Let's see and sorry MB.

64
00:03:27.700 --> 00:03:29.206
You have a court reporter here.

65
00:03:31.700 --> 00:03:33.564
Uhm, yes we do have a court reporter

66
00:03:33.564 --> 00:03:35.960
and I also just want to note that Mark

67
00:03:35.960 --> 00:03:37.860
Vaught might be joining later if you

68
00:03:37.860 --> 00:03:40.782

could just keep an eye out for him in the

69

00:03:40.782 --> 00:03:43.680

waiting room and then for the witnesses.

70

00:03:43.680 --> 00:03:47.448

Let's see, I see my keto.

71

00:03:47.450 --> 00:03:50.630

And Scott frets are you there?

72

00:03:50.630 --> 00:03:53.918

Scott Fritz Scott Fritz is there.

73

00:03:53.920 --> 00:03:58.050

And I think that's it.

74

00:03:58.050 --> 00:04:02.600

OK thanks oh sorry Khalil manual. Right?

75

00:04:04.850 --> 00:04:07.301

Alright, I think that's it. Uh,

76

00:04:07.301 --> 00:04:10.190

so if you're a witness and you're not on.

77

00:04:12.770 --> 00:04:13.410

Sorry, killer.

78

00:04:15.950 --> 00:04:20.018

Maybe it's a battery in your in your headset.

79

00:04:20.020 --> 00:04:23.748

OK sorry, thank you. Uhm, OK.

80

00:04:23.748 --> 00:04:26.420

If you're a witness and you're not on

81

00:04:26.501 --> 00:04:30.250

at the moment, you can turn your your.

82

00:04:30.250 --> 00:04:32.086
Video off and I think we're

83

00:04:32.086 --> 00:04:33.950
going to be starting so today.

84

00:04:33.950 --> 00:04:37.006
The witness list correct me if I'm wrong,

85

00:04:37.010 --> 00:04:39.506
I'm just working off the last one I.

86

00:04:39.510 --> 00:04:40.509
Have readily available,

87

00:04:40.509 --> 00:04:42.507
so it's first is kaleo man.

88

00:04:42.510 --> 00:04:45.205
Well that the Sierra Club called then

89

00:04:45.205 --> 00:04:47.977
Scott frets that the Sierra Club called

90

00:04:47.977 --> 00:04:51.149
Sierra Club will not be calling Skippy how.

91

00:04:51.150 --> 00:04:53.698
The county of Maui has Tony Lindner

92

00:04:53.698 --> 00:04:55.996
and Sierra Club. Has Mike keto?

93

00:04:55.996 --> 00:04:58.810
Are we doing it in that order?

94

00:04:58.810 --> 00:05:01.230
I thought we were going to do my kitaba for,

95

00:05:01.230 --> 00:05:03.390

UM, Tony Linder,

96

00:05:03.390 --> 00:05:07.692
but it doesn't really matter too much.

97

00:05:07.692 --> 00:05:09.798
OK and then hopefully this afternoon

98

00:05:09.798 --> 00:05:11.883
will get well enough time to do

99

00:05:11.883 --> 00:05:14.216
Lucy and in and in Scott OK Alright

100

00:05:14.216 --> 00:05:16.442
and I did confirm with Tony lender

101

00:05:16.442 --> 00:05:18.737
that he would be available all day,

102

00:05:18.740 --> 00:05:19.686
So what,

103

00:05:19.686 --> 00:05:22.051
which whichever whichever order the

104

00:05:22.051 --> 00:05:24.878
the hearing officer wants to do it in.

105

00:05:24.880 --> 00:05:25.390
OK.

106

00:05:30.160 --> 00:05:32.932
Alright, anything else before we get going

107

00:05:32.932 --> 00:05:36.996
anything at all time. Need to cover.

108

00:05:36.996 --> 00:05:40.835
No, alright Miss Chow would you please

109
00:05:40.835 --> 00:05:43.700
swear in our witness caleo manual?

110
00:05:43.700 --> 00:05:46.952
Sure thing. Where'd he go there,

111
00:05:46.952 --> 00:05:49.582
you go Mr Manuel do you soundly swear

112
00:05:49.582 --> 00:05:52.482
to tell the truth The whole truth and

113
00:05:52.482 --> 00:05:56.460
nothing but the truth? I do thank you?

114
00:05:56.460 --> 00:05:59.040
OK, Mr Frankel, please go ahead.

115
00:05:59.040 --> 00:06:00.937
Good morning, this is basically a silly

116
00:06:00.937 --> 00:06:02.720
question because we all know the answer,

117
00:06:02.720 --> 00:06:04.568
but because this is eventually going

118
00:06:04.568 --> 00:06:06.600
to be transcribed and go to a judge,

119
00:06:06.600 --> 00:06:10.360
can you tell us what position you hold?

120
00:06:10.360 --> 00:06:11.140
A clever man.

121
00:06:11.140 --> 00:06:12.960
I'm the deputy director with the Commission.

122
00:06:12.960 --> 00:06:14.100

I wanted resource management.

123

00:06:14.100 --> 00:06:15.810
And how long have you been?

124

00:06:15.810 --> 00:06:18.806
The deputy director at the Water Commission?

125

00:06:18.810 --> 00:06:22.194
I was confirmed by the Commission

126

00:06:22.194 --> 00:06:26.850
in February of 2019, right?

127

00:06:26.850 --> 00:06:28.330
Uhm?

128

00:06:28.330 --> 00:06:30.670
Did the Water Commission received the

129

00:06:30.670 --> 00:06:32.656
Sierra Club September 2021 petition

130

00:06:32.656 --> 00:06:35.104
to amend the industry interim in

131

00:06:35.104 --> 00:06:36.800
stream flow standard standards

132

00:06:36.800 --> 00:06:40.790
for a dozen E Maui streams. Yes.

133

00:06:40.790 --> 00:06:43.380
And that was on September 29th, 2021.

134

00:06:45.700 --> 00:06:47.092
I think so. I'd have to

135

00:06:47.092 --> 00:06:48.340
look at the specific date,

136
00:06:48.340 --> 00:06:51.550
so I'm assuming yes, alright?

137
00:06:51.550 --> 00:06:54.025
And what steps have been taken by

138
00:06:54.025 --> 00:06:55.555
the Commission staff in the last

139
00:06:55.555 --> 00:06:57.531
10 weeks or so since the filing

140
00:06:57.531 --> 00:06:58.976
of the petition in response?

141
00:07:03.560 --> 00:07:06.630
Commission in stream staff have

142
00:07:06.630 --> 00:07:09.480
been doing flow measurements and

143
00:07:09.480 --> 00:07:13.590
biota surveys in these streams.

144
00:07:13.590 --> 00:07:15.750
Higher actually before the

145
00:07:15.750 --> 00:07:18.942
petition was filed in order to

146
00:07:18.942 --> 00:07:22.414
collect data to work towards a

147
00:07:22.414 --> 00:07:24.838
measurable and quantifiable IFC.

148
00:07:24.840 --> 00:07:26.196
And do you think the staff

149
00:07:26.196 --> 00:07:28.399

will be able to come up with a

150

00:07:28.399 --> 00:07:29.639
recommendation within 180 days?

151

00:07:31.830 --> 00:07:34.130
Based on initial conversations

152

00:07:34.130 --> 00:07:36.430
with stuff not likely,

153

00:07:36.430 --> 00:07:39.034
there's a certain amount of data that

154

00:07:39.034 --> 00:07:42.420
they prefer to have in place in order to

155

00:07:42.420 --> 00:07:44.940
make a recommendation to the Commission.

156

00:07:44.940 --> 00:07:47.010
Understood and when do you anticipate

157

00:07:47.010 --> 00:07:48.875
the petition coming up before

158

00:07:48.875 --> 00:07:50.510
the Commission, approximately?

159

00:07:53.020 --> 00:07:55.244
As soon as we can collect that data,

160

00:07:55.250 --> 00:07:56.930
that's necessary for staff

161

00:07:56.930 --> 00:07:58.610
to provide a recommendation.

162

00:07:58.610 --> 00:08:01.520
Come I can't.

163
00:08:01.520 --> 00:08:03.860
Say exactly when that's possible.

164
00:08:03.860 --> 00:08:05.868
A lot of it has to do with.

165
00:08:05.870 --> 00:08:07.670
Uhm, streamflows and safety.

166
00:08:07.670 --> 00:08:09.920
Collecting the data as we're

167
00:08:09.920 --> 00:08:11.549
getting into wet season.

168
00:08:11.550 --> 00:08:14.246
I'm not sure how much field work and

169
00:08:14.246 --> 00:08:16.168
measurements will be able to collect.

170
00:08:16.170 --> 00:08:18.298
Sure, is it safe to say before

171
00:08:18.298 --> 00:08:20.810
the end of 2022 or do we not

172
00:08:20.810 --> 00:08:22.961
know that even I don't know?

173
00:08:22.961 --> 00:08:27.015
I would hope that we could at least bring

174
00:08:27.015 --> 00:08:30.549
something to the Commission to discuss.

175
00:08:30.550 --> 00:08:33.006
Within the 2022 year.

176
00:08:33.006 --> 00:08:34.240

Alright, thank you.

177

00:08:36.410 --> 00:08:39.091
I want to ask you about my

178

00:08:39.091 --> 00:08:40.740
Pono system upgrade plan.

179

00:08:40.740 --> 00:08:43.830
The staff submittal in November 2020.

180

00:08:43.830 --> 00:08:46.428
UM had a recommendation and maybe

181

00:08:46.428 --> 00:08:49.160
I'll bring this up for people.

182

00:08:52.170 --> 00:08:52.560
Book.

183

00:08:55.040 --> 00:08:57.460
You want to enable screen sharing, thank you.

184

00:09:01.730 --> 00:09:02.339
There we go.

185

00:09:07.770 --> 00:09:10.368
Can you see the staff submittal

186

00:09:10.368 --> 00:09:14.000
on your screen or page 13 of the

187

00:09:14.000 --> 00:09:16.706
Staffs in middle from November 2020?

188

00:09:16.710 --> 00:09:21.810
Yes, and this is exhibit Y22 by the way, so.

189

00:09:21.810 --> 00:09:23.675
No, we haven't winscott is

190
00:09:23.675 --> 00:09:25.167
entered the waiting room.

191
00:09:25.170 --> 00:09:28.590
I'm gonna let her in. Thank you.

192
00:09:31.720 --> 00:09:33.256
It's just verify that

193
00:09:33.256 --> 00:09:35.176
she's here and can hear.

194
00:09:35.180 --> 00:09:39.610
Yep, OK, so I'm just noting that

195
00:09:39.610 --> 00:09:41.180
Linscott is now in the room.

196
00:09:41.180 --> 00:09:44.356
Who is a witness to be called later.

197
00:09:44.360 --> 00:09:48.280
Go ahead. Thank you so the that staff

198
00:09:48.280 --> 00:09:51.617
submittal back from November 2020 says.

199
00:09:51.620 --> 00:09:53.978
CWR M requested the board consider

200
00:09:53.978 --> 00:09:56.020
requiring improvements in the water

201
00:09:56.020 --> 00:09:58.020
delivery systems to minimize leakage

202
00:09:58.020 --> 00:10:00.415
and waste as well as to provide

203
00:10:00.415 --> 00:10:02.010

accurate and timely gauging and

204

00:10:02.077 --> 00:10:04.485
monitoring of all off stream water uses.

205

00:10:04.490 --> 00:10:06.770
In consideration of the foregoing,

206

00:10:06.770 --> 00:10:08.636
staff believes it up remedy should

207

00:10:08.636 --> 00:10:10.215
be required to proactively address

208

00:10:10.215 --> 00:10:11.919
the issues prior to the boards,

209

00:10:11.920 --> 00:10:14.860
considering a consideration of a water lease.

210

00:10:14.860 --> 00:10:15.329
Therefore,

211

00:10:15.329 --> 00:10:18.143
staff recommends a permittee submit to

212

00:10:18.143 --> 00:10:21.328
the department a plan for their proposed.

213

00:10:21.330 --> 00:10:24.825
Upgrades to the irrigation system

214

00:10:24.825 --> 00:10:28.320
intended to address CWRS concerns

215

00:10:28.430 --> 00:10:31.072
no later than June 30th, 2021.

216

00:10:31.072 --> 00:10:33.739
This will allow staff to review and

217
00:10:33.739 --> 00:10:36.355
consult with CWR M to determine whether

218
00:10:36.355 --> 00:10:39.048
the plan is sufficient and included in

219
00:10:39.048 --> 00:10:42.510
the boards for the boards for future review.

220
00:10:42.510 --> 00:10:45.685
So my first question is,

221
00:10:45.690 --> 00:10:47.388
has anyone at the land division

222
00:10:47.388 --> 00:10:49.358
provided a copy of the upgrade plan

223
00:10:49.358 --> 00:10:52.046
to see WRM as far as you know?

224
00:10:52.050 --> 00:10:53.826
I I have not seen it.

225
00:10:53.830 --> 00:10:58.518
I don't know if staff have received that.

226
00:10:58.520 --> 00:11:00.116
Uhm, you say you haven't seen it,

227
00:11:00.120 --> 00:11:01.172
but do you recall?

228
00:11:01.172 --> 00:11:02.851
I sent you a copy, yes,

229
00:11:02.851 --> 00:11:05.692
you send me a copy via email.

230
00:11:05.692 --> 00:11:06.724

Thank you,

231

00:11:06.724 --> 00:11:09.820
so does this let me just.

232

00:11:09.820 --> 00:11:11.576
Stop sharing.

233

00:11:11.576 --> 00:11:15.578
Does the plan give you sufficient

234

00:11:15.578 --> 00:11:17.402
information to determine whether

235

00:11:17.402 --> 00:11:20.270
Mahi Pono has and will be

236

00:11:20.270 --> 00:11:22.166
sufficiently reducing system losses?

237

00:11:25.550 --> 00:11:28.658
Uh, in review of it there are

238

00:11:28.658 --> 00:11:33.460
steps that are identified, UM.

239

00:11:33.460 --> 00:11:37.496
But yeah, I I don't know if I

240

00:11:37.496 --> 00:11:39.318
have enough information to say

241

00:11:39.318 --> 00:11:41.148
that it's meeting that objective

242

00:11:41.148 --> 00:11:43.010
in this stuff submittal.

243

00:11:43.010 --> 00:11:45.170
What elements would an informative

244

00:11:45.170 --> 00:11:46.898
and effective plan half?

245

00:11:48.950 --> 00:11:56.295
Uhm? Had minimum for me uhm time frame of

246

00:11:56.295 --> 00:12:01.890
when improvements are going to be me cost.

247

00:12:01.890 --> 00:12:05.630
Who's responsible for those improvements?

248

00:12:05.630 --> 00:12:10.886
Uhm? One of the things I think included that

249

00:12:10.886 --> 00:12:14.308
that's not in it is any discussion about.

250

00:12:14.310 --> 00:12:16.910
Uhm, you know the reservoirs which we know

251

00:12:16.910 --> 00:12:20.037
play an active role in the irrigation system.

252

00:12:20.040 --> 00:12:22.160
Most of it focuses on

253

00:12:22.160 --> 00:12:23.930
irrigation system lines.

254

00:12:26.290 --> 00:12:29.377
At a minimum, those would help me

255

00:12:29.377 --> 00:12:32.357
understand whether or not those are being

256

00:12:32.357 --> 00:12:35.280
done prior to approval of any lease.

257

00:12:35.280 --> 00:12:38.890

Thank you. Also, I want to talk

258

00:12:38.890 --> 00:12:44.680
about system losses in waste. Uhm?

259

00:12:44.680 --> 00:12:46.846
So maybe I'll share screen again.

260

00:12:54.400 --> 00:12:58.855
So Andy. Admits this is an italic

261

00:12:58.855 --> 00:13:01.230
portion of the of the staff submittal.

262

00:13:01.230 --> 00:13:04.230
That total system losses Weston Maliko

263

00:13:04.230 --> 00:13:07.910
Gulch are currently higher than the

264

00:13:07.910 --> 00:13:10.250
22.7% rate that the Water Commission

265

00:13:10.250 --> 00:13:12.939
said was OK for system losses,

266

00:13:12.940 --> 00:13:16.796
but they argue that this water is not

267

00:13:16.796 --> 00:13:18.675
being irretrievably lost, however,

268

00:13:18.675 --> 00:13:21.510
or lost at all since it's being

269

00:13:21.510 --> 00:13:24.199
returned to the underlying aquifer,

270

00:13:24.200 --> 00:13:26.378
which is the source for the

271
00:13:26.378 --> 00:13:27.467
brackish water wells.

272
00:13:27.470 --> 00:13:28.962
That supplement the current

273
00:13:28.962 --> 00:13:30.827
and future irrigation needs of

274
00:13:30.827 --> 00:13:32.528
the malifaux nufarm plan,

275
00:13:32.530 --> 00:13:34.410
as well as other users in central Mali.

276
00:13:36.590 --> 00:13:39.338
Is draining streams dry and having

277
00:13:39.338 --> 00:13:42.589
that water then seep into the ground?

278
00:13:42.590 --> 00:13:45.646
That may recharge and awkward for miles away

279
00:13:45.646 --> 00:13:48.356
a reasonable and beneficial use of water.

280
00:13:52.490 --> 00:13:58.101
Uh, my initial response would be no part

281
00:13:58.101 --> 00:14:00.706
of reasonable beneficial analysis includes

282
00:14:00.710 --> 00:14:04.310
economic and efficient utilization of water,

283
00:14:04.310 --> 00:14:05.990
and that's per the code.

284
00:14:05.990 --> 00:14:09.110

And so, uhm, economically and efficiently.

285

00:14:09.110 --> 00:14:11.819

This is, you know, that isn't the

286

00:14:11.819 --> 00:14:16.030

most efficient use of of water. Uhm?

287

00:14:16.030 --> 00:14:17.764

And and it requires that balance

288

00:14:17.764 --> 00:14:19.480

for you know public interest.

289

00:14:19.480 --> 00:14:23.160

So short answer no, you know similar to

290

00:14:23.160 --> 00:14:26.264

wells that use well water or aquifer water.

291

00:14:26.270 --> 00:14:29.497

If you you pump what you need.

292

00:14:29.500 --> 00:14:31.642

You don't over pump that because it's

293

00:14:31.642 --> 00:14:33.827

going to cost more money to do so.

294

00:14:33.830 --> 00:14:37.210

Uhm, potentially stranger, resource etc.

295

00:14:37.210 --> 00:14:40.538

So yeah, we if you don't use the

296

00:14:40.538 --> 00:14:43.305

water or need that water should.

297

00:14:43.305 --> 00:14:45.440

You know and stay in its natural

298
00:14:45.440 --> 00:14:47.358
state weather and stream or aquifer,

299
00:14:47.360 --> 00:14:50.016
and then if it's needed for offstream use,

300
00:14:50.020 --> 00:14:51.966
then you know that should be justified.

301
00:14:51.970 --> 00:14:53.130
This reasonable and beneficial.

302
00:14:55.190 --> 00:14:58.970
Thank you come. Only further questions.

303
00:15:02.600 --> 00:15:05.620
You wanna stop screen sharing?

304
00:15:05.620 --> 00:15:08.950
OK, uh Alexander and but wait,

305
00:15:08.950 --> 00:15:10.665
we have some think this

306
00:15:10.665 --> 00:15:12.380
is Tony Linder coming in.

307
00:15:22.050 --> 00:15:25.114
Yeah, OK, so Lynn Scott and and uh,

308
00:15:25.120 --> 00:15:26.290
I guess it's Tony Lindner

309
00:15:26.290 --> 00:15:27.226
just entered the room.

310
00:15:27.230 --> 00:15:29.426
Can you please turn on your video and your

311
00:15:29.426 --> 00:15:31.309

audio and just introduce yourself so?

312

00:15:31.310 --> 00:15:34.014

Uh, we have it on the record that

313

00:15:34.014 --> 00:15:36.682

you're in the room. You're a.

314

00:15:36.682 --> 00:15:43.020

You gotta take off your. Audio, yeah.

315

00:15:43.020 --> 00:15:44.328

Hey, my name is Tony Linder.

316

00:15:44.330 --> 00:15:46.390

I'm the water treatment plants

317

00:15:46.390 --> 00:15:48.496

division chief or Department of water

318

00:15:48.496 --> 00:15:50.901

Supply and I manage the six surface

319

00:15:50.901 --> 00:15:53.026

water treatment plants on mount.

320

00:15:53.030 --> 00:15:55.130

Thank you Caitlin Scott.

321

00:15:55.130 --> 00:15:57.110

Good morning, I'm Lyn Scott.

322

00:15:59.730 --> 00:16:02.705

I live in Hannibal and right next

323

00:16:02.705 --> 00:16:05.030

to lava stream and the witness

324

00:16:05.030 --> 00:16:07.068

for to testify today. Thank you.

325

00:16:07.068 --> 00:16:08.982
Alright, you can both turn your

326

00:16:08.982 --> 00:16:11.066
audio off in your video off until

327

00:16:11.066 --> 00:16:14.960
your turn is up here. OK and be.

328

00:16:18.080 --> 00:16:20.000
Mr. Lindner can you also

329

00:16:20.000 --> 00:16:22.010
turn your video off? Please.

330

00:16:26.820 --> 00:16:30.660
Thank you OK Andy.

331

00:16:30.660 --> 00:16:33.474
Yes, so this is David Schmeiser

332

00:16:33.474 --> 00:16:36.200
for Ambien my good morning.

333

00:16:36.200 --> 00:16:41.900
Uh, Mr Manuel. Uhm, yeah, just really.

334

00:16:41.900 --> 00:16:47.048
Just one question and that is the.

335

00:16:47.050 --> 00:16:49.102
The information about

336

00:16:49.102 --> 00:16:51.838
potential system upgrades etc.

337

00:16:51.840 --> 00:16:53.880
That Mr Franco was asking about.

338

00:16:53.880 --> 00:16:57.148

That was information that.

339

00:16:57.150 --> 00:16:59.040
Uh, it's referenced at SeaWorld,

340

00:16:59.040 --> 00:17:01.458
had requested prior to the issuance

341

00:17:01.458 --> 00:17:03.330
of the long term water leaks.

342

00:17:03.330 --> 00:17:04.125
Is that right?

343

00:17:06.630 --> 00:17:08.868
Alright, if I'm recalling it's part

344

00:17:08.868 --> 00:17:11.685
of the submittal that see worm in

345

00:17:11.685 --> 00:17:13.365
consultation with the Commission,

346

00:17:13.370 --> 00:17:16.310
Land Division had consulted with us

347

00:17:16.310 --> 00:17:18.562
and asked our staff had recommended

348

00:17:18.562 --> 00:17:20.821
that that would be required or needed

349

00:17:20.821 --> 00:17:22.858
right in order to issue the lease.

350

00:17:22.860 --> 00:17:25.416
But police, right, alright?

351

00:17:25.416 --> 00:17:30.434
And the lease is something that is a

352
00:17:30.434 --> 00:17:35.049
more significant disposition than the.

353
00:17:35.050 --> 00:17:37.304
Vocable permit, which is rather short term,

354
00:17:37.310 --> 00:17:37.910
is that right?

355
00:17:40.750 --> 00:17:43.460
Uhm, I don't know if.

356
00:17:43.460 --> 00:17:46.200
Term of disposition is

357
00:17:46.200 --> 00:17:48.255
relevant to significance.

358
00:17:48.260 --> 00:17:53.900
I mean that. Uhm? If it.

359
00:17:53.900 --> 00:17:56.700
I would lease is a longer term period.

360
00:17:56.700 --> 00:17:57.596
Woman is shorter, period.

361
00:17:57.596 --> 00:17:59.329
I don't know if that has any

362
00:17:59.329 --> 00:18:00.340
relevance on significance.

363
00:18:00.340 --> 00:18:02.384
I don't know what you mean by like

364
00:18:02.384 --> 00:18:05.142
but we see women ask was specifically

365
00:18:05.142 --> 00:18:08.330

at that this be looked into prior

366

00:18:08.330 --> 00:18:11.010
to the release PIN issue, correct?

367

00:18:14.110 --> 00:18:17.286
I'd have to review the the actual

368

00:18:17.286 --> 00:18:20.250
scene worm submittal. I don't know.

369

00:18:20.250 --> 00:18:22.420
It was specific to the river for

370

00:18:22.493 --> 00:18:24.720
permit renewals or the lease. OK.

371

00:18:27.130 --> 00:18:32.020
In general, I think the Commission wants.

372

00:18:32.020 --> 00:18:35.160
With the intent of that recommendation is

373

00:18:35.160 --> 00:18:38.100
to see improvements to system efficiencies

374

00:18:38.100 --> 00:18:40.809
on whether you know to prevent waste

375

00:18:40.809 --> 00:18:43.538
and system loss as much as possible.

376

00:18:43.540 --> 00:18:46.516
I think that's intent whether it is short

377

00:18:46.516 --> 00:18:48.943
term and or long term. OK, thank you.

378

00:18:48.943 --> 00:18:49.998
I have no further questions.

379

00:18:52.990 --> 00:18:55.503
Take county of Maui. I have no

380

00:18:55.503 --> 00:18:57.640
questions for this witness, thank you.

381

00:19:01.050 --> 00:19:04.368
OK, uh, Mr Frankel, are you done?

382

00:19:04.370 --> 00:19:07.850
Yes, thank you. OK, thank you Mr Manual.

383

00:19:07.850 --> 00:19:09.898
You can stay if you want and just

384

00:19:09.898 --> 00:19:11.757
turn off your video and audio.

385

00:19:15.940 --> 00:19:18.040
Or you can leave all right.

386

00:19:18.040 --> 00:19:21.568
Our next witness is going to be.

387

00:19:21.570 --> 00:19:24.060
Uh Scott, Fretz witness from

388

00:19:24.060 --> 00:19:27.110
the Sierra Club and Linda Chow,

389

00:19:27.110 --> 00:19:32.920
would you please swear in Mr Fritz?

390

00:19:32.920 --> 00:19:33.973
Morning, Mr. Fritz,

391

00:19:33.973 --> 00:19:36.900
do you solemnly swear to tell the truth,

392

00:19:36.900 --> 00:19:39.124

the whole truth and nothing but the truth?

393

00:19:39.130 --> 00:19:40.698

I do thank you.

394

00:19:46.380 --> 00:19:49.120

K. Mr Franco, please proceed,

395

00:19:49.120 --> 00:19:52.435

I need to move my screens and higher up

396

00:19:52.435 --> 00:19:55.920

so I can actually see him. Thank you.

397

00:19:55.920 --> 00:19:58.013

Doctor Fred can you briefly tell us

398

00:19:58.013 --> 00:19:59.530

about your educational background?

399

00:20:02.070 --> 00:20:04.878

I have a bachelors degree in

400

00:20:04.878 --> 00:20:07.316

ecology behavior and evolution from

401

00:20:07.316 --> 00:20:10.238

University of California at San Diego.

402

00:20:10.240 --> 00:20:13.866

And I did a PhD at University

403

00:20:13.866 --> 00:20:17.700

of Hawaii at Manoa in zoology.

404

00:20:17.700 --> 00:20:21.525

Ecology evolution and conservation biology.

405

00:20:24.260 --> 00:20:26.580

Doctor Fred, what is your position at the

406
00:20:26.580 --> 00:20:28.650
Department of Land and Natural Resources?

407
00:20:28.650 --> 00:20:30.516
I'm with the division of forestry,

408
00:20:30.520 --> 00:20:32.632
wildlife, smelly branch and

409
00:20:32.632 --> 00:20:35.272
I'm the Maui branch manager.

410
00:20:35.280 --> 00:20:37.640
And before being the well, how long

411
00:20:37.640 --> 00:20:39.950
have you been the Maui branch manager?

412
00:20:39.950 --> 00:20:44.010
Since October of 2012?

413
00:20:44.010 --> 00:20:45.620
And what was your, UM,

414
00:20:45.620 --> 00:20:47.675
position before you were the

415
00:20:47.675 --> 00:20:49.730
branch chiefs for division of

416
00:20:49.803 --> 00:20:51.928
Forestry and Wildlife on Maui?

417
00:20:51.930 --> 00:20:55.386
I was the wildlife program manager

418
00:20:55.390 --> 00:20:57.078
with division of forestry.

419
00:20:57.078 --> 00:20:59.416

While I've since around 2005.

420

00:20:59.416 --> 00:21:03.292
Before that I was the forest

421

00:21:03.292 --> 00:21:05.230
Bird Recovery Coordinator,

422

00:21:05.230 --> 00:21:10.230
division of Forestry and wildlife since 2001.

423

00:21:10.230 --> 00:21:11.592
K and Octopus,

424

00:21:11.592 --> 00:21:14.316
are you familiar with East Maui?

425

00:21:14.320 --> 00:21:17.968
Yes. Uhm, and just briefly,

426

00:21:17.968 --> 00:21:21.911
can you tell us how it is that

427

00:21:21.911 --> 00:21:24.402
you're familiar with East Maui

428

00:21:24.402 --> 00:21:26.407
that says E Maui watershed?

429

00:21:28.620 --> 00:21:30.852
Uhm, well, I grew up on Maui and

430

00:21:30.852 --> 00:21:33.296
spent a lot of time in the forest.

431

00:21:33.300 --> 00:21:37.878
In my younger years exploring the forest.

432

00:21:37.880 --> 00:21:42.616
But recently in this job now,

433

00:21:42.616 --> 00:21:44.794
well, if ever since I was with

434

00:21:44.794 --> 00:21:46.490
division of Forestry and wildlife,

435

00:21:46.490 --> 00:21:47.745
there's a lot of important

436

00:21:47.745 --> 00:21:49.000
native forest in East Maui,

437

00:21:49.000 --> 00:21:51.952
so it's been the subject of a lot of

438

00:21:51.952 --> 00:21:55.283
our management work going all the

439

00:21:55.283 --> 00:21:58.649
way back to my forest birthdays.

440

00:21:58.650 --> 00:22:01.338
OK, can you tell us what the thread

441

00:22:01.338 --> 00:22:04.670
is that invasive species pose to the

442

00:22:04.670 --> 00:22:07.720
watershed within the revocable permit area?

443

00:22:07.720 --> 00:22:10.228
Invasive species degraded watersheds.

444

00:22:10.228 --> 00:22:13.363
They can alter the vegetation,

445

00:22:13.370 --> 00:22:16.810
especially invasive species like Ferrell

446

00:22:16.810 --> 00:22:20.400

ungulates and by degrading the vegetation

447

00:22:20.400 --> 00:22:25.430

they can change the way the watershed.

448

00:22:25.430 --> 00:22:28.490

Handles water change infiltration rates.

449

00:22:28.490 --> 00:22:33.537

They can degrade water quantity and quality.

450

00:22:33.540 --> 00:22:35.346

And if you could briefly speak

451

00:22:35.346 --> 00:22:37.023

to other or specific invasive

452

00:22:37.023 --> 00:22:39.088

species that you smile watershed,

453

00:22:39.090 --> 00:22:42.066

what kind of threat does miconia pose and

454

00:22:42.066 --> 00:22:44.999

what kind of threat do mosquitoes pose?

455

00:22:45.000 --> 00:22:46.250

Sorry, hang on. One second,

456

00:22:46.250 --> 00:22:48.050

I just want to note for the record mark,

457

00:22:48.050 --> 00:22:49.430

mark, what is?

458

00:22:49.430 --> 00:22:51.521

Signing into the meeting, Mr.

459

00:22:51.521 --> 00:22:53.278

Right can you just turn your video

460
00:22:53.278 --> 00:22:54.926
on briefly and introduce yourself so

461
00:22:54.926 --> 00:22:56.870
we know on the record here, here.

462
00:23:05.700 --> 00:23:08.460
Good morning everyone.

463
00:23:08.460 --> 00:23:10.460
Mark Block OK, thank you.

464
00:23:10.460 --> 00:23:12.338
You can turn your video back

465
00:23:12.338 --> 00:23:13.812
off and your audio right.

466
00:23:13.812 --> 00:23:14.700
Thank you go ahead.

467
00:23:14.700 --> 00:23:16.680
Can you repeat that question please?

468
00:23:16.680 --> 00:23:19.776
Sure Doctor Fred can you briefly

469
00:23:19.776 --> 00:23:22.877
describe the threat posed by both

470
00:23:22.877 --> 00:23:26.195
miconia and mosquitoes in the East Maui?

471
00:23:26.200 --> 00:23:30.344
The revocable permit area in East Maui.

472
00:23:30.350 --> 00:23:33.380
Invasive plants like miconia miconia.

473
00:23:33.380 --> 00:23:36.365

Our problem for watersheds because

474

00:23:36.365 --> 00:23:39.444
they can suppress the data vegetation.

475

00:23:39.444 --> 00:23:41.799
That's important for water filtration

476

00:23:41.799 --> 00:23:44.137
and function of the watersheds.

477

00:23:44.140 --> 00:23:47.360
They become essentially a monocrop.

478

00:23:47.360 --> 00:23:50.288
And that changes the way the

479

00:23:50.288 --> 00:23:51.752
watershed handles water.

480

00:23:51.760 --> 00:23:53.592
Mosquitoes are a problem

481

00:23:53.592 --> 00:23:55.424
for native forest birds.

482

00:23:55.430 --> 00:23:58.238
Native forest birds are highly susceptible

483

00:23:58.238 --> 00:24:00.929
to avian malaria and avian pox,

484

00:24:00.930 --> 00:24:03.870
and those diseases are transmitted

485

00:24:03.870 --> 00:24:07.163
by mosquitoes and mosquitoes.

486

00:24:07.163 --> 00:24:09.074
And these diseases have caused a lot

487
00:24:09.074 --> 00:24:10.659
of extinctions of native forest birds,

488
00:24:10.660 --> 00:24:12.285
and there are currently several

489
00:24:12.285 --> 00:24:14.321
species of forest birds that are

490
00:24:14.321 --> 00:24:16.433
endangered because of the presence of

491
00:24:16.433 --> 00:24:18.182
mosquitoes and with climate change.

492
00:24:18.182 --> 00:24:19.922
Those mosquitoes are now moving

493
00:24:19.922 --> 00:24:21.360
into higher elevations.

494
00:24:21.360 --> 00:24:23.768
Which have been up to this point,

495
00:24:23.770 --> 00:24:28.768
a safe refuge for those birds.

496
00:24:28.770 --> 00:24:30.186
And in your description just now,

497
00:24:30.190 --> 00:24:33.262
both mosquitoes and miconia

498
00:24:33.262 --> 00:24:34.798
were descriptions.

499
00:24:34.800 --> 00:24:37.740
Purely on the abstract level?

500
00:24:37.740 --> 00:24:40.145

Or do those comments apply

501

00:24:40.145 --> 00:24:42.061
specifically to East Maui?

502

00:24:42.061 --> 00:24:44.446
Yes, specifically to East Maui?

503

00:24:44.450 --> 00:24:45.388
Thank you.

504

00:24:45.388 --> 00:24:45.857
Now,

505

00:24:45.857 --> 00:24:47.264
approximately approximately how

506

00:24:47.264 --> 00:24:49.608
much government money is currently

507

00:24:49.608 --> 00:24:51.623
spent within the revocable permit

508

00:24:51.623 --> 00:24:53.960
area to manage the watershed,

509

00:24:53.960 --> 00:24:58.510
not including any fencing you folks do.

510

00:24:58.510 --> 00:25:00.862
So the entities that carry out

511

00:25:00.862 --> 00:25:02.937
the management in the watershed

512

00:25:02.937 --> 00:25:04.629
are not just dofa.

513

00:25:04.630 --> 00:25:06.849
So for me to get those numbers

514
00:25:06.849 --> 00:25:09.237
I had to query other entities,

515
00:25:09.237 --> 00:25:11.065
especially the East Maui

516
00:25:11.065 --> 00:25:12.893
Watershed Partnership and the

517
00:25:12.893 --> 00:25:15.208
Maui Invasive Species Committee.

518
00:25:15.210 --> 00:25:17.247
But we did that a couple years

519
00:25:17.247 --> 00:25:18.872
ago when we were presenting

520
00:25:18.872 --> 00:25:20.204
something to the board.

521
00:25:20.210 --> 00:25:23.774
So I happen to know at that time that

522
00:25:23.774 --> 00:25:27.219
our estimate was about \$800,000 a year.

523
00:25:30.930 --> 00:25:33.256
Is that amount of money, amount of

524
00:25:33.256 --> 00:25:34.971
funding sufficient to address the

525
00:25:34.971 --> 00:25:36.898
threat posed by invasive species

526
00:25:36.898 --> 00:25:38.978
within the revocable permit area?

527
00:25:41.300 --> 00:25:44.620

Well, I think sufficient is

528

00:25:44.620 --> 00:25:46.180
not necessarily precise word.

529

00:25:46.180 --> 00:25:48.280
I mean, I guess what I mean is

530

00:25:48.280 --> 00:25:49.160
people could have different

531

00:25:49.204 --> 00:25:50.699
opinions of what sufficient means.

532

00:25:50.700 --> 00:25:53.276
I can tell you there are areas that

533

00:25:53.276 --> 00:25:55.751
are well managed where there are

534

00:25:55.751 --> 00:25:58.060
native forests are intact and there

535

00:25:58.060 --> 00:26:00.370
are plenty of areas where we have

536

00:26:00.437 --> 00:26:02.317
invasive species problems that we

537

00:26:02.317 --> 00:26:04.991
would like to do better and more

538

00:26:04.991 --> 00:26:07.169
funding would help to support that.

539

00:26:07.170 --> 00:26:08.703
Thank you now.

540

00:26:08.703 --> 00:26:11.769
Can you describe what guidelines or

541
00:26:11.769 --> 00:26:14.460
priorities shape decisions on how to

542
00:26:14.460 --> 00:26:16.700
both manage the water shatter and and

543
00:26:16.700 --> 00:26:19.209
or spend money to manage the watershed?

544
00:26:19.210 --> 00:26:19.611
What?

545
00:26:19.611 --> 00:26:21.616
What are those principles that

546
00:26:21.616 --> 00:26:24.010
help you make those decisions?

547
00:26:24.010 --> 00:26:27.146
There is an E Maui watershed management

548
00:26:27.146 --> 00:26:30.370
plan that would have that information.

549
00:26:30.370 --> 00:26:32.805
I would say generally feral

550
00:26:32.805 --> 00:26:35.240
ungulates are the number one

551
00:26:35.327 --> 00:26:38.369
biggest threat to the most species.

552
00:26:38.370 --> 00:26:40.116
So the first thing we generally

553
00:26:40.116 --> 00:26:42.347
do is try to get areas fenced

554
00:26:42.347 --> 00:26:44.664

and get the feral emulates out of

555

00:26:44.735 --> 00:26:47.159
those areas and then we target

556

00:26:47.159 --> 00:26:48.775
invade other invasive species,

557

00:26:48.780 --> 00:26:50.205
especially invasive plants.

558

00:26:50.205 --> 00:26:54.260
Generally we will try to go and protect.

559

00:26:54.260 --> 00:26:57.987
The most intact areas first and then work

560

00:26:57.987 --> 00:27:00.939
out from there and in the case of East Maui,

561

00:27:00.940 --> 00:27:02.416
that's the upper elevations,

562

00:27:02.416 --> 00:27:05.839
and so we'll fence as much as we can handle.

563

00:27:05.840 --> 00:27:06.716
Manage that area,

564

00:27:06.716 --> 00:27:08.760
and then if we're going to expand,

565

00:27:08.760 --> 00:27:11.052
we would move down in elevation

566

00:27:11.052 --> 00:27:13.017
and tackle the invasive species

567

00:27:13.017 --> 00:27:15.219
using fences as we move down.

568

00:27:15.220 --> 00:27:16.750
Alright and dumb.

569

00:27:18.770 --> 00:27:19.540
Uhm?

570

00:27:21.750 --> 00:27:24.522
How does community engagement?

571

00:27:24.522 --> 00:27:28.680
What's what's that role in terms

572

00:27:28.799 --> 00:27:31.079
of your principles and guidelines

573

00:27:31.079 --> 00:27:33.594
in terms of priority setting?

574

00:27:33.600 --> 00:27:37.170
How high or low up or I don't even know how?

575

00:27:37.170 --> 00:27:38.546
How you prioritize that,

576

00:27:38.546 --> 00:27:41.497
but how is that a factor that you

577

00:27:41.497 --> 00:27:44.236
consider in managing the watershed

578

00:27:44.236 --> 00:27:47.268
is controlling invasive species?

579

00:27:47.270 --> 00:27:50.826
We always consult with communities when we

580

00:27:50.826 --> 00:27:54.067
do management plans or changes in rules.

581

00:27:54.070 --> 00:27:57.550

So it's fundamental to our

582

00:27:57.550 --> 00:28:00.334
management in that sense.

583

00:28:00.340 --> 00:28:01.680
Uhm, generally,

584

00:28:01.680 --> 00:28:05.700
community engagement is a helpful thing.

585

00:28:05.700 --> 00:28:08.885
Something that we would want to encourage.

586

00:28:08.890 --> 00:28:10.456
I guess when I mean I,

587

00:28:10.460 --> 00:28:12.476
I wasn't very precise in my language.

588

00:28:12.480 --> 00:28:15.536
I wanna be on dumb dumb consultation.

589

00:28:15.536 --> 00:28:18.532
I I guess my question is participation.

590

00:28:18.540 --> 00:28:21.072
Getting the community involved in actually

591

00:28:21.072 --> 00:28:23.259
helping eliminate invasive species is that,

592

00:28:23.260 --> 00:28:24.668
is that something you

593

00:28:24.668 --> 00:28:26.780
folks want to see as well?

594

00:28:26.780 --> 00:28:28.400
Yeah, it's something I think we

595

00:28:28.400 --> 00:28:30.518
need to do more of right now are.

596

00:28:30.520 --> 00:28:33.240
Management is at higher elevations

597

00:28:33.240 --> 00:28:35.960
and those areas are not

598

00:28:36.057 --> 00:28:39.060
accessible generally accessible,

599

00:28:39.060 --> 00:28:41.472
so most of our work is done by helicopter

600

00:28:41.472 --> 00:28:43.579
access and it's hard to get communities

601

00:28:43.579 --> 00:28:45.610
engaged to that kind of management.

602

00:28:45.610 --> 00:28:49.330
We it would be helpful if we expanded

603

00:28:49.330 --> 00:28:51.844
management into lower elevations and

604

00:28:51.844 --> 00:28:55.440
that would be more practical place for

605

00:28:55.440 --> 00:28:58.590
communities to be involved in management.

606

00:28:58.590 --> 00:29:01.102
Great, well if if the division of forestry

607

00:29:01.102 --> 00:29:03.160
and wildlife was provided additional,

608

00:29:03.160 --> 00:29:06.446

say \$500,000 per year,

609

00:29:06.446 --> 00:29:09.960

how would it have to be spent

610

00:29:09.960 --> 00:29:13.660

addressing the East Maui watershed?

611

00:29:13.660 --> 00:29:14.074

How?

612

00:29:14.074 --> 00:29:17.800

Either how would you spend that money or how

613

00:29:17.885 --> 00:29:21.349

would you decide how to spend that money?

614

00:29:21.350 --> 00:29:23.936

Go back to our management plans

615

00:29:23.936 --> 00:29:26.210

and follow the guidance there.

616

00:29:26.210 --> 00:29:28.330

And generally though this is

617

00:29:28.330 --> 00:29:30.450

similar to your last question,

618

00:29:30.450 --> 00:29:33.187

we would start at upper elevations and

619

00:29:33.187 --> 00:29:36.472

we would look to where would be the

620

00:29:36.472 --> 00:29:39.388

highest priority place to expand our work.

621

00:29:39.388 --> 00:29:42.900

Where would we be getting the most benefit

622
00:29:42.988 --> 00:29:46.030
in terms of native ecosystem protection

623
00:29:46.030 --> 00:29:49.409
for the dollars that we're spending?

624
00:29:49.410 --> 00:29:50.206
Alright.

625
00:29:50.206 --> 00:29:51.002
Uhm,

626
00:29:51.002 --> 00:29:53.390
switching gears here.

627
00:29:53.390 --> 00:29:53.681
Uh,

628
00:29:53.681 --> 00:29:55.427
as a part of your job,

629
00:29:55.430 --> 00:29:57.398
I assume you visit the revocable permit area.

630
00:29:59.480 --> 00:30:02.063
And. Would you say you've been there

631
00:30:02.063 --> 00:30:04.739
dozens of times or hundreds of times?

632
00:30:06.870 --> 00:30:08.738
Certainly dozens, maybe hundreds,

633
00:30:08.738 --> 00:30:11.540
going all the way back to.

634
00:30:11.540 --> 00:30:15.228
You know 5060 years?

635
00:30:15.228 --> 00:30:17.134

Alright, how many times would

636

00:30:17.134 --> 00:30:18.514
you say you've been with

637

00:30:18.514 --> 00:30:20.878
in there in the past year?

638

00:30:20.880 --> 00:30:23.136
Three times in the last year.

639

00:30:23.140 --> 00:30:25.352
Did you go on a site visit

640

00:30:25.352 --> 00:30:28.174
with C WRM staff and others on

641

00:30:28.174 --> 00:30:30.404
around July 19th this year?

642

00:30:32.850 --> 00:30:34.110
I don't remember the date,

643

00:30:34.110 --> 00:30:37.870
but that sounds about right. Alright.

644

00:30:37.870 --> 00:30:40.187
Can you please describe for us the

645

00:30:40.187 --> 00:30:41.750
structures and equipments that appear

646

00:30:41.750 --> 00:30:43.782
to be no longer in use that you've

647

00:30:43.840 --> 00:30:45.940
seen within the revocable permit area?

648

00:30:48.230 --> 00:30:53.284
We were reviewing a request from AMB

649
00:30:53.284 --> 00:30:58.180
EMI to abandoned certain diversions,

650
00:30:58.180 --> 00:31:00.060
and because we were going

651
00:31:00.060 --> 00:31:01.940
to submit comments to that,

652
00:31:01.940 --> 00:31:05.000
I at that at the time of that last visit,

653
00:31:05.000 --> 00:31:07.121
we had submitted comments and we were

654
00:31:07.121 --> 00:31:09.158
going back to look at him again.

655
00:31:09.160 --> 00:31:14.360
Uhm, so we were reviewing areas

656
00:31:14.360 --> 00:31:17.360
that were proposed to be abandoned

657
00:31:17.360 --> 00:31:20.599
and maybe some that already were.

658
00:31:20.600 --> 00:31:23.400
So we we were looking to put

659
00:31:23.400 --> 00:31:25.912
together comments and what we saw

660
00:31:25.912 --> 00:31:28.366
were areas where there were still.

661
00:31:30.630 --> 00:31:32.030
Structures in place that would

662
00:31:32.030 --> 00:31:33.430

change the flow of water.

663

00:31:33.430 --> 00:31:35.453
Some of them would be walls that

664

00:31:35.453 --> 00:31:37.390
would move water into a diversion.

665

00:31:37.390 --> 00:31:39.325
Diversion that would capture water

666

00:31:39.325 --> 00:31:41.710
and pipes that would move water,

667

00:31:41.710 --> 00:31:44.680
and things of that nature.

668

00:31:44.680 --> 00:31:48.328
Wait, did you see?

669

00:31:48.330 --> 00:31:50.510
Structures and equipment that

670

00:31:50.510 --> 00:31:53.148
appeared to be abandoned not

671

00:31:53.148 --> 00:31:55.438
within a stream or streambed.

672

00:31:58.940 --> 00:32:01.742
So sometimes there are things that

673

00:32:01.742 --> 00:32:04.905
look like they're pump houses or or

674

00:32:04.905 --> 00:32:07.719
pipes that are not in the streambed.

675

00:32:10.090 --> 00:32:13.746
I don't know if. How EMI uses those,

676
00:32:13.750 --> 00:32:15.900
but they may have been part of what is being

677
00:32:15.953 --> 00:32:18.202
proposed to abandoned, but I'm not sure.

678
00:32:18.202 --> 00:32:20.630
I can't say whether he and I would

679
00:32:20.630 --> 00:32:22.430
continue to use them or not,

680
00:32:22.430 --> 00:32:24.290
but yes, there are things that

681
00:32:24.290 --> 00:32:26.570
seem to be not in the stream.

682
00:32:26.570 --> 00:32:29.730
Diversion in the stream bed.

683
00:32:29.730 --> 00:32:32.804
Uhm? This is a new term to me.

684
00:32:32.810 --> 00:32:34.610
I I I don't know if I'm saying this right,

685
00:32:34.610 --> 00:32:37.490
but did you ever hear the term gatehouse?

686
00:32:37.490 --> 00:32:40.570
We've heard that term used.

687
00:32:40.570 --> 00:32:46.366
Uhm no OK uhm so have you seen those

688
00:32:46.370 --> 00:32:49.322
white PVC pipes within the revocable

689
00:32:49.322 --> 00:32:52.938

permit area that are not within stream?

690

00:32:52.940 --> 00:32:55.190

Yes, I think so and.

691

00:32:55.190 --> 00:32:58.124

Or have you seen some of those that were

692

00:32:58.130 --> 00:33:00.480

just not in use or could not be in use?

693

00:33:05.710 --> 00:33:09.031

I saw some that were indicated to us as

694

00:33:09.031 --> 00:33:12.408

not being in use because they were in.

695

00:33:12.410 --> 00:33:14.780

They were associated with diversions that

696

00:33:14.780 --> 00:33:17.675

had been reported to us to have already

697

00:33:17.675 --> 00:33:19.870

been abandoned or no longer in use.

698

00:33:24.260 --> 00:33:26.690

Uhm, going back to the event

699

00:33:26.690 --> 00:33:28.819

to the structures that allow

700

00:33:28.819 --> 00:33:30.939

for some ponding of water,

701

00:33:30.940 --> 00:33:34.150

what's the problem with that?

702

00:33:34.150 --> 00:33:37.840

Areas where water can become stagnant

703
00:33:37.840 --> 00:33:41.898
over long periods of time become

704
00:33:41.898 --> 00:33:44.870
breeding sites for mosquitoes.

705
00:33:44.870 --> 00:33:48.230
And do you agree with Lenny Freed

706
00:33:48.230 --> 00:33:50.355
suggestion that it's likely that?

707
00:33:50.360 --> 00:33:52.135
These mosquitoes infected with avian

708
00:33:52.135 --> 00:33:54.693
malaria can be blown up from low

709
00:33:54.693 --> 00:33:56.498
elevation to high elevations where

710
00:33:56.498 --> 00:33:58.409
they could affect native birds.

711
00:34:00.820 --> 00:34:06.928
Well, I suppose that's a plausible.

712
00:34:06.930 --> 00:34:08.518
A plausible scenario II.

713
00:34:08.518 --> 00:34:10.503
We do know that mosquitoes

714
00:34:10.503 --> 00:34:12.489
are in higher elevations.

715
00:34:12.490 --> 00:34:14.534
We've been detecting mosquitoes

716
00:34:14.534 --> 00:34:17.600

in higher elevations and we have

717

00:34:17.685 --> 00:34:20.480
been detecting birds infected with

718

00:34:20.480 --> 00:34:23.275
avian malaria in higher elevations.

719

00:34:23.280 --> 00:34:24.970
So one way or another,

720

00:34:24.970 --> 00:34:26.982
mosquitoes and diseases are

721

00:34:26.982 --> 00:34:29.670
moving up and is that jeopardized

722

00:34:29.670 --> 00:34:31.350
endangers the endangered birds?

723

00:34:31.350 --> 00:34:34.560
Absolutely. Hum.

724

00:34:40.800 --> 00:34:44.445
But we had started to jump on order here.

725

00:34:46.810 --> 00:34:51.780
Hey, have you seen? Uhm?

726

00:34:51.780 --> 00:34:55.650
Any white PVC pipes kind of

727

00:34:55.650 --> 00:34:58.806
hanging in the air off of a Cliff.

728

00:35:01.480 --> 00:35:04.100
Uhm, yeah, I think so.

729

00:35:04.100 --> 00:35:05.230
That don't serve any purpose,

730
00:35:05.230 --> 00:35:07.610
so just hang in there in midair.

731
00:35:07.610 --> 00:35:09.402
Well, I guess I've seen some pipes

732
00:35:09.402 --> 00:35:11.639
that seem to be sticking out of cliffs.

733
00:35:11.640 --> 00:35:14.045
I've seen some pipes that seem

734
00:35:14.045 --> 00:35:16.420
to be coming down cliffs,

735
00:35:16.420 --> 00:35:18.814
so I'm I'm not sure if that's

736
00:35:18.814 --> 00:35:19.840
characterized as hanging,

737
00:35:19.840 --> 00:35:22.975
but that's what I've seen and

738
00:35:22.975 --> 00:35:25.585
what you're not being used right?

739
00:35:25.590 --> 00:35:27.886
In areas that I believe are no

740
00:35:27.886 --> 00:35:30.570
longer being used, thank you.

741
00:35:30.570 --> 00:35:33.120
Switching gears completely.

742
00:35:33.120 --> 00:35:34.584
Would it make sense to include

743
00:35:34.584 --> 00:35:35.943

a provision in the revocable

744

00:35:35.943 --> 00:35:37.259
permits that provided controlled

745

00:35:37.259 --> 00:35:39.595
and I want to emphasize the word

746

00:35:39.595 --> 00:35:41.190
controlled public access to trails

747

00:35:41.190 --> 00:35:42.820
within the revocable permit area?

748

00:35:44.970 --> 00:35:49.550
Yes, I don't see why not. Alright.

749

00:35:49.550 --> 00:35:51.356
Thank you, I have no further questions.

750

00:35:55.440 --> 00:35:56.350
Hey Andy.

751

00:36:00.420 --> 00:36:01.688
Good morning doctor Fred's.

752

00:36:01.688 --> 00:36:03.273
My name is Trisha Caughey.

753

00:36:03.280 --> 00:36:05.446
I'm represent A and B&MI can

754

00:36:05.446 --> 00:36:07.672
you hear me OK this morning?

755

00:36:07.672 --> 00:36:10.409
Good morning, just a couple of areas

756

00:36:10.409 --> 00:36:12.583
that Mr Frankel touched on that

757
00:36:12.583 --> 00:36:15.870
I'd like to follow up on with you.

758
00:36:15.870 --> 00:36:19.950
So, uhm, you had talked about

759
00:36:19.950 --> 00:36:23.503
visiting the revocable permit area

760
00:36:23.503 --> 00:36:28.806
in July of this year and that was

761
00:36:28.806 --> 00:36:31.742
in connection with ongoing sea

762
00:36:31.742 --> 00:36:34.180
worm proceedings, correct, yes.

763
00:36:36.590 --> 00:36:37.780
And.

764
00:36:40.240 --> 00:36:43.120
The items that you saw that

765
00:36:43.120 --> 00:36:45.960
you described to Mr Frankel,

766
00:36:45.960 --> 00:36:51.588
you're not sure if those items were

767
00:36:51.590 --> 00:36:54.330
part of EMI stream diversions, correct?

768
00:36:57.390 --> 00:37:03.154
Uhm, I'm I believe it's logical to conclude

769
00:37:03.154 --> 00:37:07.282
that they are because I think they were

770
00:37:07.282 --> 00:37:11.293

presented as such to us that day. OK,

771

00:37:11.293 --> 00:37:15.237
so they were part of the stream diversions.

772

00:37:15.240 --> 00:37:17.410
That sea worm is considering.

773

00:37:17.410 --> 00:37:20.458
Is that correct? Yes, that date.

774

00:37:20.460 --> 00:37:23.908
We were looking at a particular set of

775

00:37:23.908 --> 00:37:26.798
diversions that were in one portion

776

00:37:26.798 --> 00:37:29.233
of the permit application requests,

777

00:37:29.240 --> 00:37:30.339
and so we had gone out to.

778

00:37:30.340 --> 00:37:33.448
Look at those and.

779

00:37:33.450 --> 00:37:37.720
Talked with him about those specifically OK.

780

00:37:37.720 --> 00:37:40.114
Were any formal instructions given by

781

00:37:40.114 --> 00:37:43.447
sea worm to EMI to remove these items?

782

00:37:45.780 --> 00:37:47.635
That is my understanding that

783

00:37:47.635 --> 00:37:50.342
that was part of the process we

784

00:37:50.342 --> 00:37:52.676
were engaged in was related to.

785

00:37:52.680 --> 00:37:54.724
That interaction between sea

786

00:37:54.724 --> 00:37:57.790
worm and EMI to remove those.

787

00:37:57.790 --> 00:37:59.736
So it was your understanding that this

788

00:37:59.736 --> 00:38:01.860
was part of an ongoing proceeding.

789

00:38:01.860 --> 00:38:05.398
Yes, thank you. Now, Mr.

790

00:38:05.398 --> 00:38:07.762
Frankel had also asked you about

791

00:38:07.762 --> 00:38:10.024
the threat of invasive species

792

00:38:10.024 --> 00:38:12.344
in the revocable permit area,

793

00:38:12.350 --> 00:38:14.810
and you had talked about

794

00:38:14.810 --> 00:38:16.286
miconia and ungulates.

795

00:38:16.290 --> 00:38:17.986
I'm sorry, did I find out that correctly?

796

00:38:17.990 --> 00:38:18.820
Yes, OK,

797

00:38:18.820 --> 00:38:22.140

do you recall him asking you about that?

798

00:38:22.140 --> 00:38:25.680

Yes, OK now.

799

00:38:25.680 --> 00:38:27.990

Base of species that you talked about.

800

00:38:27.990 --> 00:38:29.838

This is not a new thread,

801

00:38:29.840 --> 00:38:31.550

correct no?

802

00:38:37.930 --> 00:38:42.082

Now, Mr. Frankel had also asked you about

803

00:38:42.082 --> 00:38:45.756

structures that allow some ponding of water.

804

00:38:45.760 --> 00:38:47.904

Do you recall him asking you about that?

805

00:38:47.910 --> 00:38:52.980

Yes. Isn't Dofe working with C worm and EMI

806

00:38:52.980 --> 00:38:56.267

to address some of these structures that

807

00:38:56.267 --> 00:38:59.950

have the potential to create ponding? Yes.

808

00:39:02.090 --> 00:39:03.756

Thank you, I have no further questions.

809

00:39:06.210 --> 00:39:09.193

The county of Maui. I have no

810

00:39:09.193 --> 00:39:10.846

questions for this witness, thank you.

811
00:39:10.846 --> 00:39:15.042
OK, I I have a few questions, I guess.

812
00:39:15.042 --> 00:39:17.405
First. Mr. Frankel did you provide

813
00:39:17.405 --> 00:39:19.080
questions in advance to Mr.

814
00:39:19.080 --> 00:39:22.643
Fritz and Mr Manuel? I did so,

815
00:39:22.643 --> 00:39:25.958
but did they do any declarations, no OK.

816
00:39:25.958 --> 00:39:29.015
Uhm, seems like just want to give them a

817
00:39:29.015 --> 00:39:31.751
heads up in terms of what I was asking.

818
00:39:31.760 --> 00:39:33.505
Alright seems like that would

819
00:39:33.505 --> 00:39:35.620
have been helpful for the other

820
00:39:35.620 --> 00:39:37.414
party is just to prep here.

821
00:39:37.420 --> 00:39:40.020
Uhm, well I guess for future reference and

822
00:39:40.020 --> 00:39:43.136
this is always been unclear for me for years.

823
00:39:43.140 --> 00:39:45.498
Whether we're allowed to sit down

824
00:39:45.498 --> 00:39:48.025

with dealing our employees to draft

825

00:39:48.025 --> 00:39:50.225
declarations for contested case years,

826

00:39:50.230 --> 00:39:52.533
I've always been nervous about that because

827

00:39:52.533 --> 00:39:55.000
of the rules of professional conduct.

828

00:39:55.000 --> 00:39:57.004
I got specific authorization

829

00:39:57.004 --> 00:40:00.010
from Colin Lao to speak with.

830

00:40:00.010 --> 00:40:00.859
Dylan are employees,

831

00:40:00.859 --> 00:40:03.554
but I thought it was a bridge too far

832

00:40:03.554 --> 00:40:05.510
for me to actually write declarations,

833

00:40:05.510 --> 00:40:07.934
but if that's something the board

834

00:40:07.934 --> 00:40:09.550
and department are authorizing,

835

00:40:09.550 --> 00:40:11.798
what I will do that in the future?

836

00:40:11.800 --> 00:40:13.756
OK, thank you for that clarification.

837

00:40:13.760 --> 00:40:14.792
I I'm not.

838
00:40:14.792 --> 00:40:17.200
I'm not saying that at this time.

839
00:40:17.200 --> 00:40:17.788
OK, Mr.

840
00:40:17.788 --> 00:40:20.140
Fritz, I just have a couple of questions.

841
00:40:20.140 --> 00:40:21.298
So first of all, what's the?

842
00:40:21.300 --> 00:40:24.390
What's the upper elevation of the.

843
00:40:24.390 --> 00:40:27.570
RP areas art.

844
00:40:27.570 --> 00:40:29.460
Here is go all the way to the summit.

845
00:40:29.460 --> 00:40:32.841
So that is 9000 feet 8000 feet

846
00:40:32.841 --> 00:40:35.640
7000 feet in some areas.

847
00:40:35.640 --> 00:40:39.095
And what's the upper elevation

848
00:40:39.095 --> 00:40:41.168
of the diversions?

849
00:40:41.170 --> 00:40:44.440
The highest diversion would probably

850
00:40:44.440 --> 00:40:47.462
be in 2000 foot range, maybe,

851
00:40:47.462 --> 00:40:50.030

maybe a little higher than that.

852

00:40:50.030 --> 00:40:51.798

And what's the what's?

853

00:40:51.798 --> 00:40:54.008

The prevalence of mosquitoes in

854

00:40:54.008 --> 00:40:57.074

the 2000 foot range in in in

855

00:40:57.074 --> 00:40:59.819

East Maui very prevalent and.

856

00:40:59.819 --> 00:41:02.834

So the the diversions that

857

00:41:02.834 --> 00:41:04.960

are creating ponding.

858

00:41:04.960 --> 00:41:07.494

Would be at the highest at the

859

00:41:07.494 --> 00:41:09.120

2000 foot level, maybe higher.

860

00:41:09.120 --> 00:41:10.740

I'd have to look at maps.

861

00:41:10.740 --> 00:41:12.548

I don't remember specifically,

862

00:41:12.548 --> 00:41:15.260

so what's the general vector of

863

00:41:15.340 --> 00:41:17.590

mosquitoes to the higher elevations?

864

00:41:21.120 --> 00:41:22.746

The mosquitoes can move so they

865
00:41:22.746 --> 00:41:24.619
can travel up to higher elevations

866
00:41:24.619 --> 00:41:26.429
if the higher the breeding

867
00:41:26.429 --> 00:41:28.029
areas are available for him,

868
00:41:28.030 --> 00:41:30.145
the higher they're going to be able to move.

869
00:41:30.150 --> 00:41:33.360
I think as Mr Frankel mentioned,

870
00:41:33.360 --> 00:41:35.225
there was a peer reviewed

871
00:41:35.225 --> 00:41:37.090
paper by a professor who.

872
00:41:39.200 --> 00:41:43.826
Had evidence or positive that wind could

873
00:41:43.826 --> 00:41:46.116
blow mosquitoes into upper elevations.

874
00:41:46.120 --> 00:41:49.802
But are they breeding at the upper

875
00:41:49.802 --> 00:41:51.870
elevations? I don't know if they're

876
00:41:51.870 --> 00:41:53.102
breeding in upper elevations.

877
00:41:53.110 --> 00:41:54.520
There certainly is a limit

878
00:41:54.520 --> 00:41:56.350

to how high they can breed,

879

00:41:56.350 --> 00:41:58.492

So what would they be breeding

880

00:41:58.492 --> 00:42:00.860

in in the upper elevations?

881

00:42:00.860 --> 00:42:04.689

Anything that can hold water so there.

882

00:42:06.760 --> 00:42:11.320

Pigs can damage areas. For example,

883

00:42:11.320 --> 00:42:14.600

one of the areas that's known to be.

884

00:42:14.600 --> 00:42:16.870

Causing higher breeding sites is

885

00:42:16.870 --> 00:42:19.140

when pigs damage harpool ferns,

886

00:42:19.140 --> 00:42:21.748

and it leaves a depression in the Fern.

887

00:42:21.750 --> 00:42:25.246

Water collects in that and that can cause

888

00:42:25.246 --> 00:42:27.973

mosquito breeding at much higher elevations

889

00:42:27.973 --> 00:42:31.660

than would have occurred naturally.

890

00:42:31.660 --> 00:42:32.956

So can you, uhm,

891

00:42:32.956 --> 00:42:36.139

so so pigs are one of the invasive

892
00:42:36.139 --> 00:42:39.004
species that these Maui watershed.

893
00:42:39.010 --> 00:42:42.475
Participants are tackling is that is that

894
00:42:42.475 --> 00:42:45.834
a generalized generalized invasive species?

895
00:42:45.834 --> 00:42:48.198
Uhm versus what?

896
00:42:48.200 --> 00:42:50.559
What are the what are the potential

897
00:42:50.559 --> 00:42:52.442
vectors for invasive species of

898
00:42:52.442 --> 00:42:54.050
the actual irrigation system?

899
00:42:57.250 --> 00:42:59.146
And I'm not sure what you're asking me.

900
00:42:59.150 --> 00:43:00.926
Can you clarify that?

901
00:43:00.926 --> 00:43:04.996
My question is, my question has to do with.

902
00:43:05.000 --> 00:43:08.036
The the the potential vectors of

903
00:43:08.036 --> 00:43:11.150
invasive species of the irrigation.

904
00:43:11.150 --> 00:43:15.154
The versions. And pipes and the roads,

905
00:43:15.160 --> 00:43:17.640

main roads and potentially

906

00:43:17.640 --> 00:43:19.500
trails maintaining them.

907

00:43:19.500 --> 00:43:23.388
Uhm, as vectors for invasive species

908

00:43:23.388 --> 00:43:26.900
versus the general invasive species.

909

00:43:26.900 --> 00:43:28.584
That are prevalent present

910

00:43:28.584 --> 00:43:30.689
throughout all of East Maui.

911

00:43:32.770 --> 00:43:35.465
I guess the word vectors throwing me

912

00:43:35.465 --> 00:43:38.028
because vectors of biological term that

913

00:43:38.028 --> 00:43:39.696
we use for mosquitoes carrying things.

914

00:43:39.700 --> 00:43:43.270
And do you mean sources of? What?

915

00:43:45.380 --> 00:43:48.160
What invasive species are are

916

00:43:48.160 --> 00:43:50.940
prevalent throughout East Maui versus

917

00:43:50.940 --> 00:43:53.412
invasive species that can be spread

918

00:43:53.412 --> 00:43:56.408
by the operation of the ditch system?

919
00:44:03.200 --> 00:44:07.004
The operation of the ditch system

920
00:44:07.004 --> 00:44:10.230
can spread invasive species on.

921
00:44:13.930 --> 00:44:16.420
On equipment and people who are

922
00:44:16.420 --> 00:44:19.430
in that system. So that would be

923
00:44:19.430 --> 00:44:22.070
in the roads and diversions that

924
00:44:22.163 --> 00:44:25.400
are associated with the system.

925
00:44:28.060 --> 00:44:31.324
OK, so invasive species generally, beyond

926
00:44:31.324 --> 00:44:37.549
that are spread by wind, birds, animals.

927
00:44:40.440 --> 00:44:46.255
K. Does UM this? A&B and EMI participate

928
00:44:46.255 --> 00:44:49.248
in watershed management in East Maui,

929
00:44:49.250 --> 00:44:54.420
either directly or. Financially.

930
00:44:54.420 --> 00:44:57.717
Yes, they are a member of the

931
00:44:57.717 --> 00:45:00.390
East Maui Watershed Partnership.

932
00:45:00.390 --> 00:45:02.862

They attend regular meetings,

933

00:45:02.862 --> 00:45:06.570

participate in writing the management plans.

934

00:45:06.570 --> 00:45:09.416

Do they fund any of the actions?

935

00:45:09.416 --> 00:45:12.000

Either either directly through

936

00:45:12.000 --> 00:45:14.584

their staff actions or.

937

00:45:14.590 --> 00:45:18.300

Or come through funding work

938

00:45:18.300 --> 00:45:21.268

of the watershed partnership.

939

00:45:21.270 --> 00:45:26.430

I'm not aware of any funds that the

940

00:45:26.430 --> 00:45:30.721

EMI provides for management. OK.

941

00:45:30.721 --> 00:45:37.410

Uhm, so you mentioned trails? Uhm?

942

00:45:37.410 --> 00:45:41.530

Being you think appropriate in the RP areas.

943

00:45:41.530 --> 00:45:44.554

Where would the parking be for those trails?

944

00:45:47.430 --> 00:45:49.800

There are already trails so.

945

00:45:52.490 --> 00:45:54.190

So just to be clear,

946
00:45:54.190 --> 00:45:56.174
we're not necessarily talking

947
00:45:56.174 --> 00:45:58.158
about making new trails.

948
00:45:58.160 --> 00:46:01.030
If there was managed access.

949
00:46:01.030 --> 00:46:02.413
Parking is limited,

950
00:46:02.413 --> 00:46:04.718
but there are opportunities to

951
00:46:04.718 --> 00:46:07.110
create areas for people to park.

952
00:46:07.110 --> 00:46:10.734
And so as we've been scoping this idea,

953
00:46:10.740 --> 00:46:12.800
we've been specifically looking at

954
00:46:12.800 --> 00:46:15.198
issues related to how people would

955
00:46:15.198 --> 00:46:17.350
be able to park to go in areas.

956
00:46:17.350 --> 00:46:19.125
There are some parking areas

957
00:46:19.125 --> 00:46:20.431
already and there's opportunities

958
00:46:20.431 --> 00:46:22.016
to create new parking areas.

959
00:46:24.040 --> 00:46:26.370

OK, are those parking areas?

960

00:46:26.370 --> 00:46:27.435

Is that controlled?

961

00:46:27.435 --> 00:46:28.855

Access parking areas are

962

00:46:28.855 --> 00:46:30.859

they are the parking areas?

963

00:46:30.860 --> 00:46:35.620

Like available now, are they full or?

964

00:46:35.620 --> 00:46:38.539

We with visitors coming back are there

965

00:46:38.540 --> 00:46:40.244

are there issues with parking in

966

00:46:40.244 --> 00:46:42.179

the areas that you're talking about?

967

00:46:42.180 --> 00:46:44.000

Parking is very limited.

968

00:46:44.000 --> 00:46:47.732

Public access to this area would need to

969

00:46:47.732 --> 00:46:50.486

be carefully managed and very managed,

970

00:46:50.490 --> 00:46:51.858

and then last question,

971

00:46:51.858 --> 00:46:54.134

and this is something that came up

972

00:46:54.134 --> 00:46:58.480

in prior prior discussions here, but.

973

00:46:58.480 --> 00:47:01.835
The sofa, Forestry and wildlife

974

00:47:01.835 --> 00:47:04.519
participated in wildfire management

975

00:47:04.520 --> 00:47:07.766
wildfire control in in central Maui.

976

00:47:09.970 --> 00:47:12.046
Yes, we participate.

977

00:47:12.046 --> 00:47:16.198
We have the primary responsibility for

978

00:47:16.198 --> 00:47:19.370
responding to fires on dofa glands,

979

00:47:19.370 --> 00:47:23.066
and we will assist in respond to

980

00:47:23.066 --> 00:47:27.017
fires with other parties such as mpad.

981

00:47:27.020 --> 00:47:29.820
When we are requested to do so,

982

00:47:29.820 --> 00:47:31.760
and the there's this dofe

983

00:47:31.760 --> 00:47:33.700
participate in drawing water by

984

00:47:33.771 --> 00:47:35.711
helicopter out of the reservoirs

985

00:47:35.711 --> 00:47:38.130
in central Maui to fight fires.

986

00:47:40.700 --> 00:47:41.984

We will draw water from wherever

987

00:47:41.984 --> 00:47:43.637
we can get it when we need it.

988

00:47:46.370 --> 00:47:50.008
OK. OK, thanks, that's all I have.

989

00:47:50.010 --> 00:47:54.490
Anybody else have questions? Yes.

990

00:47:54.490 --> 00:47:58.018
I've got to France. We talked about.

991

00:47:58.020 --> 00:47:59.931
We spent some time talking about that

992

00:47:59.931 --> 00:48:02.290
one day in July when you visited with

993

00:48:02.290 --> 00:48:07.760
CW ARM staff C WRM staff, but UHM.

994

00:48:10.310 --> 00:48:12.626
On other days, and there apparently

995

00:48:12.626 --> 00:48:15.012
been many when you've been in

996

00:48:15.012 --> 00:48:16.548
the revocable permit area,

997

00:48:16.550 --> 00:48:18.710
let's say within the last.

998

00:48:18.710 --> 00:48:23.238
Few years. Have you seen?

999

00:48:23.240 --> 00:48:26.444
Unused equipment that is

1000
00:48:26.444 --> 00:48:29.648
not within a streambed?

1001
00:48:29.650 --> 00:48:32.179
Like unused pipes.

1002
00:48:32.180 --> 00:48:35.870
Well, like I said I it's I would not.

1003
00:48:38.500 --> 00:48:41.615
I I don't know that I can

1004
00:48:41.615 --> 00:48:44.069
judge if something is unused.

1005
00:48:44.070 --> 00:48:48.716
So I I guess a better way

1006
00:48:48.716 --> 00:48:50.780
to explain it is that.

1007
00:48:50.780 --> 00:48:55.771
Yes, we we went to inspect other

1008
00:48:55.771 --> 00:49:00.487
sets of diversions separate from that

1009
00:49:00.487 --> 00:49:04.194
July visit on some previous visits

1010
00:49:04.194 --> 00:49:06.799
because we were putting together

1011
00:49:06.799 --> 00:49:09.669
comments that were pursuant to a

1012
00:49:09.669 --> 00:49:12.234
request to abandon those diversions.

1013
00:49:12.240 --> 00:49:13.548

We were looking at.

1014

00:49:13.548 --> 00:49:15.510

So it was my understanding those

1015

00:49:15.576 --> 00:49:17.524

diversions were either abandoned

1016

00:49:17.524 --> 00:49:20.034

or going to be abandoned.

1017

00:49:20.040 --> 00:49:21.532

And yes, it there.

1018

00:49:21.532 --> 00:49:24.590

Would have if those were indeed abandoned.

1019

00:49:24.590 --> 00:49:26.425

There would have been structures

1020

00:49:26.425 --> 00:49:28.640

that were no longer being used.

1021

00:49:28.640 --> 00:49:29.354

Uhm, well,

1022

00:49:29.354 --> 00:49:31.496

how about have you seen pipes

1023

00:49:31.496 --> 00:49:33.689

that are not connected on one

1024

00:49:33.689 --> 00:49:36.340

end and therefore allowed you to

1025

00:49:36.340 --> 00:49:38.640

conclude that they are abandoned

1026

00:49:38.722 --> 00:49:41.284

in areas in the local permit area?

1027

00:49:44.920 --> 00:49:46.332

I'm not sure I.

1028

00:49:46.332 --> 00:49:49.690

I mean I I don't feel comfortable.

1029

00:49:49.690 --> 00:49:52.458

Did saying that a pipe is no longer

1030

00:49:52.458 --> 00:49:54.807

being used if I see it up there?

1031

00:49:54.810 --> 00:49:56.547

My point was,

1032

00:49:56.547 --> 00:50:00.600

if they if these areas are abandoned.

1033

00:50:00.600 --> 00:50:03.160

We were recommending that the

1034

00:50:03.160 --> 00:50:06.490

structure speed removed because.

1035

00:50:06.490 --> 00:50:09.330

Because they're no longer use.

1036

00:50:09.330 --> 00:50:11.465

And what's wrong with just letting the

1037

00:50:11.465 --> 00:50:13.180

unused stuff remain on state land?

1038

00:50:15.850 --> 00:50:19.126

It depends on what that structure is.

1039

00:50:19.130 --> 00:50:21.194

If it's something that is breeding

1040

00:50:21.194 --> 00:50:23.575

mosquitoes, we do not want to

1041

00:50:23.575 --> 00:50:26.436
create new mosquito breeding areas.

1042

00:50:26.436 --> 00:50:29.846
If it's something that could

1043

00:50:29.846 --> 00:50:31.830
be come in disrepair and fall

1044

00:50:31.830 --> 00:50:33.820
apart and end up in the stream,

1045

00:50:33.820 --> 00:50:35.953
then it would be washed down in the street.

1046

00:50:38.040 --> 00:50:41.005
Thank you, no further questions

1047

00:50:41.005 --> 00:50:43.825
K NB any further questions no

1048

00:50:43.825 --> 00:50:45.636
no further questions county.

1049

00:50:45.636 --> 00:50:48.016
No further questions. Thank you.

1050

00:50:48.020 --> 00:50:49.460
OK thank you, Mr Fritz.

1051

00:50:49.460 --> 00:50:51.740
You're free to stay interfere video

1052

00:50:51.740 --> 00:50:54.460
and audio or go about your day.

1053

00:50:54.460 --> 00:50:57.400
Appreciate your time here today.

1054

00:50:57.400 --> 00:51:00.910

Let's take a 5 minute break.

1055

00:51:00.910 --> 00:51:02.434

Maybe a 10 minute?

1056

00:51:02.434 --> 00:51:06.018

10 minute break and we'll be back with some.

1057

00:51:08.160 --> 00:51:10.550

Mr Keto right, is that

1058

00:51:10.550 --> 00:51:12.000

right right? Thank you.

1059

01:02:24.070 --> 01:02:26.394

Hi can I just test that everyone

1060

01:02:26.394 --> 01:02:30.419

can hear me now? It sounds great.

1061

01:02:30.420 --> 01:02:31.795

Apparently there's a mute button

1062

01:02:31.795 --> 01:02:34.046

on it that I had pressed that I

1063

01:02:34.046 --> 01:02:35.770

did not know about, so thanks.

1064

01:02:39.570 --> 01:02:44.206

OK, we are back. It is 1204 no.

1065

01:02:44.206 --> 01:02:46.838

I mean, sorry 1004,

1066

01:02:46.840 --> 01:02:50.952

thank you am let's see is is your

1067

01:02:50.952 --> 01:02:53.200

court reporter set mississagi.

1068

01:02:53.200 --> 01:02:56.250
I'm here, thank you great.

1069

01:02:56.250 --> 01:02:58.848
Alright we are moving to Mike

1070

01:02:58.850 --> 01:03:02.408
Michael Quito as the next witness.

1071

01:03:02.410 --> 01:03:03.602
Linda Chow would you

1072

01:03:03.602 --> 01:03:05.092
please swear in Mr Quito?

1073

01:03:07.980 --> 01:03:08.961
Good morning, Mr.

1074

01:03:08.961 --> 01:03:10.269
Key to good morning.

1075

01:03:10.270 --> 01:03:12.726
Do you solemnly swear to tell the truth?

1076

01:03:12.730 --> 01:03:14.930
The whole truth and nothing but the truth?

1077

01:03:14.930 --> 01:03:18.330
I do. Thank you, thanks.

1078

01:03:18.330 --> 01:03:22.686
Thank you and, uh, Mr Kido.

1079

01:03:22.690 --> 01:03:24.808
Is a witness for Sierra Club,

1080

01:03:24.810 --> 01:03:28.080
so Mr Franco, please go ahead.

1081
01:03:28.080 --> 01:03:29.754
Secure you've already submitted a declaration

1082
01:03:29.754 --> 01:03:31.497
that you signed other statements in it

1083
01:03:31.497 --> 01:03:33.120
true and correct as far as you know,

1084
01:03:33.120 --> 01:03:34.818
yes they are.

1085
01:03:34.818 --> 01:03:37.270
OK, uh, Mr Keto is available

1086
01:03:37.270 --> 01:03:38.260
for cross examination.

1087
01:03:45.390 --> 01:03:51.454
OK Sir, go ahead. Now this is David,

1088
01:03:51.454 --> 01:03:54.890
show my surfer and BMI my day.

1089
01:03:54.890 --> 01:03:58.186
And, uh, so uh, Mr Key to you,

1090
01:03:58.190 --> 01:04:01.081
I think you indicated that you submitted

1091
01:04:01.081 --> 01:04:04.230
a declaration that was specifically in

1092
01:04:04.230 --> 01:04:06.665
connection with this contested case hearing.

1093
01:04:06.665 --> 01:04:07.460
Is that right?

1094
01:04:07.460 --> 01:04:09.509

Yes, that's correct.

1095

01:04:09.509 --> 01:04:14.290

And earlier you had submitted a declaration.

1096

01:04:14.290 --> 01:04:18.111

October 30th, 2019 UH,

1097

01:04:18.111 --> 01:04:22.473

in connection with the Sir clubs.

1098

01:04:22.480 --> 01:04:25.516

A lawsuit against the border land

1099

01:04:25.516 --> 01:04:27.034

and natural resources.

1100

01:04:27.040 --> 01:04:29.640

And you might want to trial in 2020.

1101

01:04:29.640 --> 01:04:30.870

Is that right?

1102

01:04:30.870 --> 01:04:31.690

That's correct.

1103

01:04:31.690 --> 01:04:33.965

And you also did a supplemental declaration.

1104

01:04:36.520 --> 01:04:38.032

In 2020, after you.

1105

01:04:38.032 --> 01:04:40.791

Had gone on your site visit in

1106

01:04:40.791 --> 01:04:43.722

February of 2020. Is that right?

1107

01:04:43.722 --> 01:04:47.590

That's correct. No, uhm.

1108
01:04:47.590 --> 01:04:54.150
Exhibit A. X15, I'm sorry why 50?

1109
01:04:54.150 --> 01:04:57.454
In this case, and could we have?

1110
01:04:57.460 --> 01:05:02.270
Nicole, can you come? Bring up.

1111
01:05:02.270 --> 01:05:08.180
Screen sharing to exhibit. X. 15

1112
01:05:19.270 --> 01:05:21.670
OK, and could you scroll?

1113
01:05:24.970 --> 01:05:26.518
XX50 is the.

1114
01:05:28.590 --> 01:05:30.310
Sierra Club's petition for inter

1115
01:05:30.310 --> 01:05:31.686
mainstream flow standards and

1116
01:05:31.686 --> 01:05:33.620
if you Scroll down through that,

1117
01:05:33.620 --> 01:05:36.518
you'll come to declaration of Michael

1118
01:05:36.518 --> 01:05:38.866
Kido dated October 30th, 2019.

1119
01:05:38.866 --> 01:05:41.554
Could you Scroll down to there?

1120
01:05:41.560 --> 01:05:44.146
So David why? 59 X 50.

1121
01:05:44.150 --> 01:05:48.820

I'm sorry. Excuse me. Why is it?

1122

01:05:53.970 --> 01:05:57.610

Alright, do you see that I do right?

1123

01:05:57.610 --> 01:06:01.790

And, uh, that is a one to

1124

01:06:01.790 --> 01:06:04.710

essentially a three page.

1125

01:06:04.710 --> 01:06:08.400

Declaration just scroll. To Page 3.

1126

01:06:11.410 --> 01:06:15.334

All right, this was done by you in October

1127

01:06:15.334 --> 01:06:19.221

of 2019 and this was done without having made

1128

01:06:19.221 --> 01:06:24.490

any specific site visits or field trips.

1129

01:06:24.490 --> 01:06:28.470

To the East Maui area.

1130

01:06:28.470 --> 01:06:32.334

In connection with the preparation of this.

1131

01:06:32.340 --> 01:06:34.200

October 30th, 2019.

1132

01:06:34.200 --> 01:06:36.680

Declaration is that correct?

1133

01:06:36.680 --> 01:06:39.572

That's correct, although I have did look

1134

01:06:39.572 --> 01:06:43.611

at a few Maui streams in the 90s, right?

1135
01:06:43.611 --> 01:06:46.739
OK, and I understand that you you had.

1136
01:06:46.740 --> 01:06:48.760
You know some extensive background

1137
01:06:48.760 --> 01:06:50.955
that's discussed in your declaration,

1138
01:06:50.955 --> 01:06:55.555
but as far as anything specific to any

1139
01:06:55.560 --> 01:07:00.450
opinions or testimony that you've given.

1140
01:07:00.450 --> 01:07:02.886
Uh, as of October 30th, 2019,

1141
01:07:02.886 --> 01:07:05.936
when you when you produce this first,

1142
01:07:05.936 --> 01:07:09.428
the declaration Jen Denise site specific

1143
01:07:09.428 --> 01:07:11.878
investigations for that investigation.

1144
01:07:11.880 --> 01:07:15.401
That time I had not seen any

1145
01:07:15.401 --> 01:07:16.910
of the diversion,

1146
01:07:16.910 --> 01:07:18.974
but you had opinions that you

1147
01:07:18.974 --> 01:07:20.783
developed over the course of

1148
01:07:20.783 --> 01:07:22.608

your career that that basically.

1149

01:07:22.610 --> 01:07:23.920

I mean, I'm going to.

1150

01:07:23.920 --> 01:07:25.341

I'm sure I'm going to oversimplify this

1151

01:07:25.341 --> 01:07:26.948

and you can correct me if I'm wrong,

1152

01:07:26.950 --> 01:07:29.960

but basically.

1153

01:07:29.960 --> 01:07:34.278

You developed a belief that you plantation

1154

01:07:34.278 --> 01:07:37.224

a diversion structures to extent that

1155

01:07:37.224 --> 01:07:39.759

they interfered with Margaret Mackay.

1156

01:07:39.760 --> 01:07:44.582

Continuous flow for Hawaiian streams was not

1157

01:07:44.582 --> 01:07:47.750

a good thing for the native Hawaiian fish.

1158

01:07:47.750 --> 01:07:49.360

I mean, is that fair?

1159

01:07:49.360 --> 01:07:50.238

Yeah, sure,

1160

01:07:50.238 --> 01:07:51.116

OK, right?

1161

01:07:51.116 --> 01:07:54.556

And so the mountains to see as is

1162
01:07:54.556 --> 01:07:56.571
something that basically you've had

1163
01:07:56.571 --> 01:07:59.501
an opinion about for a long time and.

1164
01:07:59.501 --> 01:08:03.708
And so you rented your opinion and

1165
01:08:03.708 --> 01:08:06.522
October 30th of 2019 not having

1166
01:08:06.522 --> 01:08:08.568
specifically looked at the MI diversions,

1167
01:08:08.570 --> 01:08:10.955
but just saying that in general these

1168
01:08:10.955 --> 01:08:14.350
are bad and management of the streams

1169
01:08:14.350 --> 01:08:17.678
should have a core principle of trying

1170
01:08:17.678 --> 01:08:21.950
to foster mountain to see connectivity.

1171
01:08:21.950 --> 01:08:25.280
Right, that's correct, and that's based upon,

1172
01:08:25.280 --> 01:08:27.500
UM, observations in streams that

1173
01:08:27.500 --> 01:08:30.790
have diversions on them, though.

1174
01:08:30.790 --> 01:08:34.010
And I've never looked at the specifically,

1175
01:08:34.010 --> 01:08:37.405

the Maui Smiley diversions of multiple right?

1176

01:08:37.410 --> 01:08:39.030

And that's that's not something

1177

01:08:39.030 --> 01:08:40.615

that's new or controversial, right?

1178

01:08:40.615 --> 01:08:42.325

I mean, isn't it fairly well

1179

01:08:42.325 --> 01:08:43.749

accepted that I think so.

1180

01:08:43.750 --> 01:08:45.328

The diversion structures?

1181

01:08:45.328 --> 01:08:47.958

They're not good for fish.

1182

01:08:47.960 --> 01:08:48.777

Yeah,

1183

01:08:48.777 --> 01:08:49.594

OK,

1184

01:08:49.594 --> 01:08:51.228

so uhm.

1185

01:08:53.640 --> 01:09:00.590

Now on the third page of your. October. 30

1186

01:09:03.600 --> 01:09:05.922

Declaration did the last paragraph I'm

1187

01:09:05.922 --> 01:09:09.106

just going to quote from that, and if

1188

01:09:09.106 --> 01:09:12.690

that's up there in the screen and follow.

1189
01:09:12.690 --> 01:09:15.224
You say, well, I believe that surface

1190
01:09:15.224 --> 01:09:18.043
water diversion from streams in Hawaii is

1191
01:09:18.043 --> 01:09:20.123
necessary to support human populations.

1192
01:09:20.130 --> 01:09:22.860
It must be done responsibly and adequately

1193
01:09:22.860 --> 01:09:25.340
justified as a specific quantity,

1194
01:09:25.340 --> 01:09:28.130
duration, location of water withdrawn

1195
01:09:28.130 --> 01:09:30.362
and for what purpose.

1196
01:09:30.370 --> 01:09:33.520
And I read that correctly, yes.

1197
01:09:33.520 --> 01:09:37.422
And so while from a purely

1198
01:09:37.422 --> 01:09:39.454
biological point of view.

1199
01:09:39.460 --> 01:09:42.862
Uh, it would be nice and beneficial for the

1200
01:09:42.862 --> 01:09:45.919
streams to have mountain to see continuity.

1201
01:09:49.250 --> 01:09:50.669
Nonetheless, surface water

1202
01:09:50.669 --> 01:09:52.993

diversions from streams, as you say,

1203

01:09:52.993 --> 01:09:54.799
it is necessary in Hawaii to

1204

01:09:54.799 --> 01:09:56.710
support human populations, correct?

1205

01:09:56.710 --> 01:09:59.170
Yeah, I I agree with that.

1206

01:09:59.170 --> 01:10:03.402
OK and so and so when we're looking at the

1207

01:10:03.402 --> 01:10:06.986
specifics of diversion systems and this is,

1208

01:10:06.990 --> 01:10:09.802
this is very large one, right?

1209

01:10:09.802 --> 01:10:13.447
You agree with that. Which has a.

1210

01:10:13.447 --> 01:10:15.363
Significant amount of historical

1211

01:10:15.363 --> 01:10:18.191
support for human populations in terms

1212

01:10:18.191 --> 01:10:20.950
of providing irrigation water for

1213

01:10:20.950 --> 01:10:23.672
agriculture in central Mali, correct?

1214

01:10:23.672 --> 01:10:24.476
That's correct,

1215

01:10:24.476 --> 01:10:28.769
so so so if water is going to be necessary

1216
01:10:28.769 --> 01:10:32.024
for diversion for those kind of activities,

1217
01:10:32.030 --> 01:10:33.680
it's going to have to come.

1218
01:10:33.680 --> 01:10:34.916
And if it's coming from stream,

1219
01:10:34.920 --> 01:10:35.916
why it's going to have to

1220
01:10:35.916 --> 01:10:36.681
come from somewhere, right?

1221
01:10:36.681 --> 01:10:39.030
Sure, and so if what you're doing is you're

1222
01:10:39.087 --> 01:10:41.436
looking at a stream system like in this case,

1223
01:10:41.440 --> 01:10:43.582
it's got how many 30 something for

1224
01:10:43.582 --> 01:10:45.700
you streams that are being diverted,

1225
01:10:45.700 --> 01:10:48.118
or major streams were being diverted.

1226
01:10:48.120 --> 01:10:49.710
Yeah, that's correct.

1227
01:10:49.710 --> 01:10:53.876
So so I mean, so it can't simply be that

1228
01:10:53.876 --> 01:10:56.478
all of these streams are going to be.

1229
01:10:56.480 --> 01:11:00.110

A 100% of maintaining our natural

1230

01:11:00.110 --> 01:11:02.268
condition and there also be a diversion,

1231

01:11:02.270 --> 01:11:03.814
right, yeah.

1232

01:11:03.814 --> 01:11:06.130
So so so.

1233

01:11:06.130 --> 01:11:10.882
So in order to be able to make judgments.

1234

01:11:10.890 --> 01:11:13.810
About to what extent

1235

01:11:13.810 --> 01:11:15.344
restoration should be done,

1236

01:11:15.344 --> 01:11:18.086
then it has to be strategic and it has to

1237

01:11:18.086 --> 01:11:20.310
be targeted towards going to the most good,

1238

01:11:20.310 --> 01:11:21.706
right? That's correct, yeah.

1239

01:11:21.706 --> 01:11:24.410
So you don't have any disagreement with that?

1240

01:11:24.410 --> 01:11:26.442
No, I don't know.

1241

01:11:26.442 --> 01:11:28.214
OK? And the.

1242

01:11:28.214 --> 01:11:32.006
OK, and in this first declaration,

1243
01:11:32.010 --> 01:11:36.798
October 30th, 2019, there are no specific.

1244
01:11:36.800 --> 01:11:37.533
Uh.

1245
01:11:37.533 --> 01:11:38.999
Recommendations about.

1246
01:11:38.999 --> 01:11:42.664
How to Target stream restoration

1247
01:11:42.664 --> 01:11:46.306
specifically in East Valley, right?

1248
01:11:46.306 --> 01:11:49.890
Well at that time.

1249
01:11:49.890 --> 01:11:52.830
From the plans for the egg up,

1250
01:11:52.830 --> 01:11:54.220
however, it's going to be

1251
01:11:54.220 --> 01:11:55.980
restored on that lab wasn't known.

1252
01:11:55.980 --> 01:11:58.620
I don't think that was determined.

1253
01:11:58.620 --> 01:11:59.178
Uhm,

1254
01:11:59.178 --> 01:12:03.958
and I was actually encouraged by Mr House,

1255
01:12:03.958 --> 01:12:08.298
description of Mahi pono's operations.

1256
01:12:08.300 --> 01:12:12.908

I was quite pleased at the crop selection.

1257

01:12:12.910 --> 01:12:16.441
I saw on the list and they are

1258

01:12:16.441 --> 01:12:17.909
doing it really scientifically.

1259

01:12:17.910 --> 01:12:18.658
You know,

1260

01:12:18.658 --> 01:12:20.528
measuring even if Apple transpiration,

1261

01:12:20.530 --> 01:12:22.438
so I think they have a really good idea

1262

01:12:22.438 --> 01:12:24.515
of how much water they're going to use.

1263

01:12:24.520 --> 01:12:28.078
And and with that in place.

1264

01:12:28.080 --> 01:12:30.481
I think we're on the way to

1265

01:12:30.481 --> 01:12:32.539
understanding how much water they're

1266

01:12:32.539 --> 01:12:34.939
actually going to responsibly need.

1267

01:12:34.940 --> 01:12:39.728
To fully fully platter that landscape.

1268

01:12:39.730 --> 01:12:42.174
I didn't see or hear any talk

1269

01:12:42.174 --> 01:12:44.058
about the marketing aspect of it,

1270

01:12:44.060 --> 01:12:46.880

but I assume a lot of it is going to

1271

01:12:46.958 --> 01:12:49.695

local markets in Cali over on Maui,

1272

01:12:49.700 --> 01:12:52.580

and so I think we should support that.

1273

01:12:52.580 --> 01:12:54.620

I think how I needs diversified

1274

01:12:54.620 --> 01:12:56.320

AG models like that one.

1275

01:12:56.320 --> 01:12:58.133

I think it's a good start from

1276

01:12:58.133 --> 01:13:01.409

what I heard the other day.

1277

01:13:01.410 --> 01:13:02.604

OK and uhm.

1278

01:13:02.604 --> 01:13:04.992

So I assume that reason you

1279

01:13:04.992 --> 01:13:07.713

mentioned that is because this is

1280

01:13:07.713 --> 01:13:10.360

further recognition of the fact that

1281

01:13:10.360 --> 01:13:13.398

that if you're going to have to.

1282

01:13:13.400 --> 01:13:16.060

And divert stream water to

1283

01:13:16.060 --> 01:13:17.428

support human populations.

1284

01:13:17.428 --> 01:13:20.164
As you say that it should

1285

01:13:20.164 --> 01:13:22.280
be done strategically.

1286

01:13:22.280 --> 01:13:24.254
And I think what you what

1287

01:13:24.254 --> 01:13:25.570
you just pointed out

1288

01:13:25.647 --> 01:13:28.342
is that part of being able to do that

1289

01:13:28.342 --> 01:13:30.133
strategically doesn't know what the water

1290

01:13:30.133 --> 01:13:32.114
demands are going to be right, right?

1291

01:13:32.114 --> 01:13:33.956
What crops are going to grow?

1292

01:13:33.960 --> 01:13:35.478
How much water each copy uses,

1293

01:13:35.480 --> 01:13:37.328
which is all being looked at.

1294

01:13:37.330 --> 01:13:40.075
But but again, the the water is if it's

1295

01:13:40.075 --> 01:13:43.146
if the water is coming from the streams,

1296

01:13:43.150 --> 01:13:45.698
then whatever water is used for supporting

1297
01:13:45.698 --> 01:13:48.371
human populations is obviously not going to

1298
01:13:48.371 --> 01:13:51.036
be available for stream restoration, right?

1299
01:13:51.036 --> 01:13:53.094
Yeah, that's OK.

1300
01:13:53.094 --> 01:13:56.238
So so therefore the answer policy

1301
01:13:56.238 --> 01:14:00.044
decision that needs to be made as to.

1302
01:14:00.044 --> 01:14:04.293
In terms of managing the resources to,

1303
01:14:04.300 --> 01:14:05.430
you know if there's going

1304
01:14:05.430 --> 01:14:06.334
to be a restoration,

1305
01:14:06.340 --> 01:14:07.930
how much restoration is going?

1306
01:14:07.930 --> 01:14:09.170
Is there going to be,

1307
01:14:09.170 --> 01:14:12.278
and where is it going to be?

1308
01:14:12.280 --> 01:14:15.380
Considering all the competing factors.

1309
01:14:15.380 --> 01:14:16.026
Correct, right?

1310
01:14:16.026 --> 01:14:18.287

And I I think the question becomes

1311

01:14:18.287 --> 01:14:20.575
which streams are going to be targeted,

1312

01:14:20.580 --> 01:14:21.546
targeted for restoration.

1313

01:14:21.546 --> 01:14:24.218
I think that's a that's a key issue

1314

01:14:24.218 --> 01:14:26.330
because all the streams are staying.

1315

01:14:26.330 --> 01:14:29.100
This is a really unique part of the of Maui.

1316

01:14:29.100 --> 01:14:31.752
There aren't many locations like this

1317

01:14:31.752 --> 01:14:35.092
kind of strange system in the state.

1318

01:14:35.092 --> 01:14:38.236
Maybe Hamakor calls might be similar,

1319

01:14:38.240 --> 01:14:40.608
but I think this is actually not holy.

1320

01:14:40.610 --> 01:14:42.020
Alcohol is really good need,

1321

01:14:42.020 --> 01:14:44.260
just in the way that the strains

1322

01:14:44.260 --> 01:14:46.135
come down from high elevation

1323

01:14:46.135 --> 01:14:49.680
over 8000 feet and then and then.

1324

01:14:49.680 --> 01:14:52.800

There are a lot of waterfalls in between and

1325

01:14:52.800 --> 01:14:56.240

there aren't many places like that in Hawaii.

1326

01:14:56.240 --> 01:15:01.588

So it's a really complex environment and.

1327

01:15:01.590 --> 01:15:03.459

I think the given is that we

1328

01:15:03.459 --> 01:15:05.180

need to support the tag there.

1329

01:15:05.180 --> 01:15:07.259

I heard discussion this morning of limiting

1330

01:15:07.259 --> 01:15:09.358

the amount of leakage in the system.

1331

01:15:09.360 --> 01:15:10.468

That's really important if

1332

01:15:10.468 --> 01:15:12.130

you're going to take water off.

1333

01:15:12.130 --> 01:15:14.286

Uhm, you need to be sure that

1334

01:15:14.286 --> 01:15:15.800

your system isn't leaking.

1335

01:15:15.800 --> 01:15:17.924

And just throwing water in places

1336

01:15:17.924 --> 01:15:20.068

that they aren't supposed to go like.

1337

01:15:20.070 --> 01:15:22.330

You know, come open dishes,

1338

01:15:22.330 --> 01:15:23.318
that kind of thing.

1339

01:15:23.318 --> 01:15:24.800
So that needs to be controlled.

1340

01:15:24.800 --> 01:15:25.553
Once that's done,

1341

01:15:25.553 --> 01:15:27.059
you know how much water the

1342

01:15:27.059 --> 01:15:28.730
farm operation is going to need,

1343

01:15:28.730 --> 01:15:30.440
and that's going to be a process you know,

1344

01:15:30.440 --> 01:15:33.084
as we heard the other day that you know

1345

01:15:33.084 --> 01:15:35.460
it's they're all trying to figure this out,

1346

01:15:35.460 --> 01:15:37.840
and they're trying to adapt a

1347

01:15:37.840 --> 01:15:39.600
plantation system that basically

1348

01:15:39.600 --> 01:15:42.340
took all the water they could.

1349

01:15:42.340 --> 01:15:44.209
And from what I've heard the other

1350

01:15:44.209 --> 01:15:45.808
day they're trying to scale that

1351
01:15:45.808 --> 01:15:47.537
down so that they can better manage

1352
01:15:47.592 --> 01:15:49.356
the water on in the farm operation,

1353
01:15:49.360 --> 01:15:51.600
which is the right thing to do.

1354
01:15:51.600 --> 01:15:53.928
So I think our task becomes,

1355
01:15:53.930 --> 01:15:58.600
which streams do we restore?

1356
01:15:58.600 --> 01:16:00.626
And how do we restore them, right?

1357
01:16:00.626 --> 01:16:03.258
And you're familiar with the fact that

1358
01:16:03.258 --> 01:16:05.942
the Water Commission came out with a

1359
01:16:05.942 --> 01:16:11.130
decision in 22,018 which acted upon a.

1360
01:16:11.130 --> 01:16:13.098
A certain number of the streams

1361
01:16:13.098 --> 01:16:15.214
that had been petitioned for interim

1362
01:16:15.214 --> 01:16:16.690
instream flow standards sometimes

1363
01:16:16.690 --> 01:16:18.410
is referred to as 27.

1364
01:16:18.410 --> 01:16:20.662

You know what I'm referring to sure, right?

1365

01:16:20.662 --> 01:16:23.974
And so the water Commission was

1366

01:16:23.974 --> 01:16:26.569
actually tasked with having to

1367

01:16:26.570 --> 01:16:28.774
make those judgments about,

1368

01:16:28.774 --> 01:16:30.427
given what the

1369

01:16:30.430 --> 01:16:33.346
needs are to support agriculture and.

1370

01:16:33.350 --> 01:16:36.812
And considering you know the particular

1371

01:16:36.812 --> 01:16:40.398
streams in question judgments had to be

1372

01:16:40.398 --> 01:16:43.170
made in terms of prioritizing where.

1373

01:16:43.170 --> 01:16:46.305
Restoration water should be most

1374

01:16:46.305 --> 01:16:49.210
strategically targeted, right?

1375

01:16:49.210 --> 01:16:51.730
That's correct, yeah I I have some.

1376

01:16:51.730 --> 01:16:54.484
I take some exception to some

1377

01:16:54.484 --> 01:16:56.320
of those judgments though.

1378

01:16:56.320 --> 01:16:58.168
OK, the problem with some of

1379

01:16:58.168 --> 01:16:59.820
the things that they're using.

1380

01:16:59.820 --> 01:17:00.960
You know, for example.

1381

01:17:00.960 --> 01:17:03.277
I read somewhere I think one of the

1382

01:17:03.277 --> 01:17:04.921
reports that they wanted to like

1383

01:17:04.921 --> 01:17:06.697
you can't save all the streams.

1384

01:17:06.700 --> 01:17:10.308
So let's save not only Haley instead of

1385

01:17:10.308 --> 01:17:14.968
Kylo because they fall into the same day.

1386

01:17:14.968 --> 01:17:17.536
You know, I disagree with that.

1387

01:17:17.540 --> 01:17:19.458
I think we don't know how much

1388

01:17:19.458 --> 01:17:21.513
about how these proximate streams

1389

01:17:21.513 --> 01:17:23.386
operate ecologically, you know.

1390

01:17:23.386 --> 01:17:25.504
And maybe those two streams are

1391

01:17:25.504 --> 01:17:28.048

connected so closely that they need to

1392

01:17:28.048 --> 01:17:30.554
be draining into that common warm water

1393

01:17:30.554 --> 01:17:32.892
body in order to like maximize its.

1394

01:17:32.900 --> 01:17:35.994
Potential we just don't know that stuff.

1395

01:17:36.000 --> 01:17:40.810
OK, and your and uh and again in

1396

01:17:40.810 --> 01:17:43.303
your October 30th 2019 declaration,

1397

01:17:43.303 --> 01:17:46.129
you didn't express any opinions in

1398

01:17:46.129 --> 01:17:49.067
there or provide any testimony or

1399

01:17:49.067 --> 01:17:51.104
suggestions about where restoration

1400

01:17:51.104 --> 01:17:53.520
should be targeted, correct?

1401

01:17:53.520 --> 01:17:53.852
Yeah,

1402

01:17:53.852 --> 01:17:56.508
I I just do not have a good

1403

01:17:56.508 --> 01:17:59.061
enough idea of what those strings

1404

01:17:59.061 --> 01:18:01.129
where those streams are.

1405
01:18:01.130 --> 01:18:03.308
What's in them at different elevations?

1406
01:18:03.310 --> 01:18:04.910
What the populations of

1407
01:18:04.910 --> 01:18:06.650
things are and and again,

1408
01:18:06.650 --> 01:18:08.270
like I mentioned that it's just

1409
01:18:08.270 --> 01:18:10.079
a unique system there there are.

1410
01:18:10.080 --> 01:18:12.306
I saw in one of the the

1411
01:18:12.310 --> 01:18:13.850
tips are reports you know,

1412
01:18:13.850 --> 01:18:17.186
figure they had that there are 50 waterfalls.

1413
01:18:17.190 --> 01:18:19.460
And that.

1414
01:18:19.460 --> 01:18:21.920
Metal section to the ocean and

1415
01:18:21.920 --> 01:18:24.279
eleven of those terminated in Ocean.

1416
01:18:24.280 --> 01:18:31.659
So we have no idea what how that affects.

1417
01:18:31.660 --> 01:18:33.608
Recruitment of native species

1418
01:18:33.608 --> 01:18:36.043

coming back into the system.

1419

01:18:36.050 --> 01:18:36.320

I mean,

1420

01:18:36.320 --> 01:18:37.989

I'd like to get in a boat and go look at him,

1421

01:18:37.990 --> 01:18:41.006

but you know, we just do not know.

1422

01:18:41.010 --> 01:18:43.836

What all these systems are pretty

1423

01:18:43.836 --> 01:18:45.720

ecologically what's in them?

1424

01:18:45.720 --> 01:18:47.405

What the densities or distribution

1425

01:18:47.405 --> 01:18:49.440

of native species are in them?

1426

01:18:49.440 --> 01:18:52.128

And I think that needs to be known.

1427

01:18:54.250 --> 01:18:55.690

To make the best judgment minimal,

1428

01:18:55.690 --> 01:18:56.858

which dreams to restore.

1429

01:18:59.560 --> 01:19:02.728

OK, I'd like to to direct your attention

1430

01:19:02.728 --> 01:19:06.048

now to the supplemental declaration.

1431

01:19:06.050 --> 01:19:09.852

Dated that you gave dated February 27th,

1432

01:19:09.852 --> 01:19:12.620
2020, which is also.

1433

01:19:12.620 --> 01:19:15.812
Included in the exhibit Y50 soft we

1434

01:19:15.812 --> 01:19:19.319
we had your original declaration.

1435

01:19:19.320 --> 01:19:22.082
I was scrolling down now and then there's

1436

01:19:22.082 --> 01:19:23.852
a supplemental experts Report declaration

1437

01:19:23.852 --> 01:19:26.655
on my cookie dough dated February 27th,

1438

01:19:26.655 --> 01:19:29.290
2020. You see that yeah,

1439

01:19:29.290 --> 01:19:33.340
alright, so so this was.

1440

01:19:33.340 --> 01:19:35.860
And there's basically two things,

1441

01:19:35.860 --> 01:19:38.340
and again, correct me if I'm wrong that

1442

01:19:38.340 --> 01:19:40.679
that that you're talking about here.

1443

01:19:40.680 --> 01:19:43.045
In terms of supplementing what

1444

01:19:43.045 --> 01:19:44.464
you previously said.

1445

01:19:44.470 --> 01:19:47.977

The first thing you mentioned is that

1446

01:19:47.977 --> 01:19:50.105
since submitting your declaration

1447

01:19:50.105 --> 01:19:53.920
in October of 2019 that you have

1448

01:19:53.920 --> 01:19:56.024
reviewed James Parham's assessment

1449

01:19:56.024 --> 01:19:59.006
of the environmental impact of stream

1450

01:19:59.006 --> 01:20:01.398
diversions on 33 E palm extremes.

1451

01:20:01.400 --> 01:20:04.640
Using the Hawaiian stream habitat

1452

01:20:04.640 --> 01:20:11.060
evaluation procedure. Uhm and.

1453

01:20:11.060 --> 01:20:13.559
Yeah, you see what I'm referring to.

1454

01:20:13.560 --> 01:20:17.058
Yeah, and so and so so.

1455

01:20:17.058 --> 01:20:19.970
So after doing your your October

1456

01:20:19.970 --> 01:20:22.450
30th declaration which basically

1457

01:20:22.450 --> 01:20:26.719
just summarized in at a high level.

1458

01:20:26.720 --> 01:20:29.560
The general problem that diversion

1459

01:20:29.560 --> 01:20:31.832
structures can cause for.

1460

01:20:31.840 --> 01:20:36.022
Uh, the the native search and the

1461

01:20:36.022 --> 01:20:38.666
general desirability of having

1462

01:20:38.666 --> 01:20:41.310
mountain to see connectivity.

1463

01:20:41.310 --> 01:20:42.561
So then you.

1464

01:20:42.561 --> 01:20:45.480
Then you you supplemented by saying that

1465

01:20:45.560 --> 01:20:50.030
you've reviewed Mr Farms work right right?

1466

01:20:50.030 --> 01:20:54.510
And the the work that he did?

1467

01:20:54.510 --> 01:20:57.010
Could that be described as

1468

01:20:57.010 --> 01:21:00.921
habitat modeling and habitat?

1469

01:21:00.921 --> 01:21:03.192
Quantification. Yeah, that's.

1470

01:21:03.192 --> 01:21:06.588
It's a habitat model he's applying.

1471

01:21:06.590 --> 01:21:08.770
Come and.

1472

01:21:08.770 --> 01:21:10.430

My approach is observational.

1473

01:21:10.430 --> 01:21:12.505
Rather than actually like trying

1474

01:21:12.505 --> 01:21:14.837
to develop some sort of habitat,

1475

01:21:14.840 --> 01:21:18.907
apply that in general across the landscape.

1476

01:21:18.910 --> 01:21:20.700
I prefer to get in the stream and look at it.

1477

01:21:23.480 --> 01:21:29.069
OK, but it's looking now at the not now.

1478

01:21:29.070 --> 01:21:30.736
Just so we're clear, just want to

1479

01:21:30.736 --> 01:21:32.746
follow up on that point for a second.

1480

01:21:32.750 --> 01:21:34.262
When you say that you prefer to

1481

01:21:34.262 --> 01:21:36.096
get in the stream and look at it,

1482

01:21:36.100 --> 01:21:38.278
are you saying that you don't

1483

01:21:38.278 --> 01:21:40.130
think habitat modeling is good,

1484

01:21:40.130 --> 01:21:43.110
or should should be done?

1485

01:21:43.110 --> 01:21:44.825
I generally agree with the

1486

01:21:44.825 --> 01:21:46.540
results of part time study.

1487

01:21:46.540 --> 01:21:48.403
He did do his a lot of his calibration

1488

01:21:48.403 --> 01:21:50.229
up in Nemo holy Stream on Khawaja,

1489

01:21:50.230 --> 01:21:52.274
where I have a lot of work.

1490

01:21:52.280 --> 01:21:53.504
We did a lot of work up there,

1491

01:21:53.510 --> 01:21:55.526
so I really know that stream.

1492

01:21:55.530 --> 01:21:58.808
And you know, I was generally, you know,

1493

01:21:58.808 --> 01:22:01.624
kind of pleased with his, his, uh?

1494

01:22:01.624 --> 01:22:02.146
Uhm?

1495

01:22:02.146 --> 01:22:04.756
The results of his model,

1496

01:22:04.760 --> 01:22:07.072
but you know basically what he's saying is

1497

01:22:07.072 --> 01:22:09.448
that these guys do not go into the streams.

1498

01:22:09.450 --> 01:22:10.422
It's still outside,

1499

01:22:10.422 --> 01:22:12.690

and then they they take their measurements

1500

01:22:12.751 --> 01:22:14.476
outside the streaming using he's,

1501

01:22:14.480 --> 01:22:16.268
you know, video camera,

1502

01:22:16.268 --> 01:22:19.220
but they're trying to do is to

1503

01:22:19.220 --> 01:22:21.364
quantify somehow habitat there.

1504

01:22:21.364 --> 01:22:24.044
And based upon those measurements

1505

01:22:24.044 --> 01:22:25.850
at that elevation,

1506

01:22:25.850 --> 01:22:27.685
there should be these species

1507

01:22:27.685 --> 01:22:28.786
within that habitat.

1508

01:22:28.790 --> 01:22:30.894
So is that not actually getting there and

1509

01:22:30.894 --> 01:22:33.038
looking to see if those species are there?

1510

01:22:33.040 --> 01:22:33.844
So no.

1511

01:22:33.844 --> 01:22:34.648
You know,

1512

01:22:34.648 --> 01:22:38.638
and and in a system like on Maui E Maui,

1513

01:22:38.640 --> 01:22:40.585
where they've been dirt diverted

1514

01:22:40.585 --> 01:22:43.000
so drastically for so many years,

1515

01:22:43.000 --> 01:22:45.750
it's hard to say what you know

1516

01:22:45.750 --> 01:22:48.810
is normal anymore in that system.

1517

01:22:48.810 --> 01:22:50.610
So I mean, I could go back to the

1518

01:22:50.610 --> 01:22:52.350
point that I made at the beginning.

1519

01:22:52.350 --> 01:22:54.550
I think what needs to be done is.

1520

01:22:54.550 --> 01:22:57.518
Somebody needs to go and look at these

1521

01:22:57.518 --> 01:23:00.118
dreams from the mountain to the sea.

1522

01:23:00.120 --> 01:23:03.520
And I'm just determined what?

1523

01:23:03.520 --> 01:23:05.788
Population assemblages our species

1524

01:23:05.788 --> 01:23:09.190
don't wear that kind of thing.

1525

01:23:09.190 --> 01:23:12.409
Uhm and then.

1526

01:23:12.410 --> 01:23:13.415

Based upon that,

1527

01:23:13.415 --> 01:23:16.234

I think we could come up with some

1528

01:23:16.234 --> 01:23:18.634

conclusion about which streams are the

1529

01:23:18.634 --> 01:23:22.099

best of the best potential to be restored.

1530

01:23:22.100 --> 01:23:25.600

One of the outcomes of that would

1531

01:23:25.600 --> 01:23:27.460

be increased production of.

1532

01:23:27.460 --> 01:23:32.436

Come over and Opal larvae into the ocean.

1533

01:23:32.440 --> 01:23:34.936

And once we increase those populations

1534

01:23:34.936 --> 01:23:37.778

that we have better recruitment and

1535

01:23:37.778 --> 01:23:40.242

I went back and I pulled back the

1536

01:23:40.242 --> 01:23:42.546

summary data that I took in the 90s.

1537

01:23:42.550 --> 01:23:45.010

We actually visited 100 under

1538

01:23:45.010 --> 01:23:46.978

the stream three times.

1539

01:23:46.980 --> 01:23:51.230

In soon.

1540

01:23:51.230 --> 01:23:54.052
12 seventeen, 98511,

1541

01:23:54.052 --> 01:23:57.786
ninety nine and nine 2999 Lorhan OV.

1542

01:23:57.786 --> 01:24:00.880
And and each time we went there

1543

01:24:00.977 --> 01:24:03.797
applying our methodology that.

1544

01:24:03.800 --> 01:24:05.930
Stream scored 100% so it's a

1545

01:24:05.930 --> 01:24:07.820
reference stream for the state.

1546

01:24:07.820 --> 01:24:10.061
It's one of the best dreams is that our

1547

01:24:10.061 --> 01:24:11.767
existing all the species were there.

1548

01:24:11.770 --> 01:24:15.140
We even one time so only holy up in there.

1549

01:24:15.140 --> 01:24:17.002
So it's a really healthy stream and

1550

01:24:17.002 --> 01:24:18.989
there was a lot of recruitment going

1551

01:24:18.989 --> 01:24:21.140
on in those in that lower stream,

1552

01:24:21.140 --> 01:24:23.548
so I think there's a lot of

1553

01:24:23.548 --> 01:24:25.050

potential for animals coming

1554

01:24:25.050 --> 01:24:27.040
back up into these systems.

1555

01:24:27.040 --> 01:24:30.760
It's just that in Harvey.

1556

01:24:30.760 --> 01:24:32.310
You know they go upstream

1557

01:24:32.310 --> 01:24:33.860
and then they probably may.

1558

01:24:33.860 --> 01:24:35.476
You know they run into diversions up there,

1559

01:24:35.480 --> 01:24:37.322
so I don't know what happens

1560

01:24:37.322 --> 01:24:38.550
to those populations once

1561

01:24:38.616 --> 01:24:41.208
they get in. Into our stream like an OB,

1562

01:24:41.210 --> 01:24:43.580
but they're definitely going in. No.

1563

01:24:46.060 --> 01:24:49.340
OK, so getting back to your your comments

1564

01:24:49.340 --> 01:24:52.874
about perm in your February 27th,

1565

01:24:52.874 --> 01:24:55.610
2020 of Supplemental Declaration.

1566

01:24:55.610 --> 01:24:58.865
Uhm, I'm just looking at the last.

1567

01:24:58.870 --> 01:25:01.240
Two sentence is we say although

1568

01:25:01.240 --> 01:25:02.903
perms quantified the harm.

1569

01:25:02.903 --> 01:25:04.587
His overall conclusion is

1570

01:25:04.587 --> 01:25:06.250
no different than mine,

1571

01:25:06.250 --> 01:25:07.498
so that that's what you said.

1572

01:25:07.500 --> 01:25:10.926
February 27th, 2020, right? Yeah?

1573

01:25:10.926 --> 01:25:13.800
And then the next sentence says.

1574

01:25:13.800 --> 01:25:17.090
The quantification perm provides is

1575

01:25:17.090 --> 01:25:19.108
particularly important because native

1576

01:25:19.108 --> 01:25:21.551
aquatic organisms do not return to the

1577

01:25:21.551 --> 01:25:23.830
same stream from work where they emerged,

1578

01:25:23.830 --> 01:25:27.323
its impact is cumulative across a broad

1579

01:25:27.323 --> 01:25:29.813
geographic region right behind right

1580

01:25:29.813 --> 01:25:31.978

and in this supplemental declaration,

1581

01:25:31.980 --> 01:25:35.680
you really didn't criticize.

1582

01:25:35.680 --> 01:25:38.120
Perms work did you know?

1583

01:25:38.120 --> 01:25:39.420
I still don't criticize him,

1584

01:25:39.420 --> 01:25:40.998
I just have a different approach.

1585

01:25:41.000 --> 01:25:43.480
I mean, I, I think it's from what I've seen.

1586

01:25:43.480 --> 01:25:47.596
He's he's validated his his data.

1587

01:25:47.600 --> 01:25:50.704
But I prefer to to do an observation

1588

01:25:50.704 --> 01:25:52.599
approach rather than modeling.

1589

01:25:52.600 --> 01:25:53.800
OK, but uhm.

1590

01:25:53.800 --> 01:25:57.470
But in order to do an observation approach,

1591

01:25:57.470 --> 01:26:00.578
I mean that would be extremely.

1592

01:26:00.580 --> 01:26:03.290
Time consuming and labor intensive

1593

01:26:03.290 --> 01:26:06.000
to gather by visual underwater

1594

01:26:06.085 --> 01:26:08.170
reconnaissance or survey.

1595

01:26:08.170 --> 01:26:10.060
All the sort of data that you'd like to see,

1596

01:26:10.060 --> 01:26:10.332
right?

1597

01:26:10.332 --> 01:26:11.964
It's tough work that's for sure,

1598

01:26:11.970 --> 01:26:13.878
but we've done it on streams

1599

01:26:13.878 --> 01:26:17.080
and all the islands, you know.

1600

01:26:17.080 --> 01:26:20.966
And in the absence of that kind of data,

1601

01:26:20.970 --> 01:26:23.724
then habitat modeling is another alternative

1602

01:26:23.724 --> 01:26:27.183
way to analyze it and quantify it, right?

1603

01:26:27.183 --> 01:26:29.724
I suppose so, but I would still

1604

01:26:29.724 --> 01:26:32.510
want to validate his model there.

1605

01:26:32.510 --> 01:26:33.155
You know, I,

1606

01:26:33.155 --> 01:26:34.660
I think it works in Lima wholly,

1607

01:26:34.660 --> 01:26:36.844

which is a different kind of stream,

1608

01:26:36.850 --> 01:26:39.104
but I would like to take his.

1609

01:26:39.110 --> 01:26:40.808
Go to the spot cities murdering,

1610

01:26:40.810 --> 01:26:42.950
you know get get the guys in the water and

1611

01:26:43.006 --> 01:26:45.096
it's just look at it and see what we see,

1612

01:26:45.100 --> 01:26:45.527
right?

1613

01:26:45.527 --> 01:26:48.089
And just dollar date that he's

1614

01:26:48.089 --> 01:26:51.840
actually his model is actually.

1615

01:26:51.840 --> 01:26:54.164
Showing species composition and

1616

01:26:54.164 --> 01:26:56.518
species density, that kind of thing.

1617

01:26:56.518 --> 01:26:57.706
Size classes all that.

1618

01:26:59.950 --> 01:27:01.978
Correctly and then if that it

1619

01:27:01.978 --> 01:27:03.772
works out then fine. Let's use

1620

01:27:03.772 --> 01:27:04.877
that modeling 'cause it's easier.

1621
01:27:07.030 --> 01:27:10.789
Alright, and but in February of 2020,

1622
01:27:10.790 --> 01:27:15.151
I mean the sort of data that you're

1623
01:27:15.151 --> 01:27:18.186
talking about from actual visual,

1624
01:27:18.190 --> 01:27:19.832
underwater surveillance,

1625
01:27:19.832 --> 01:27:23.116
etc that wasn't available

1626
01:27:23.120 --> 01:27:25.028
to you in February of 2020,

1627
01:27:25.030 --> 01:27:26.346
correct, correct?

1628
01:27:26.346 --> 01:27:29.636
But you did have access

1629
01:27:29.636 --> 01:27:31.698
to power have problems.

1630
01:27:33.780 --> 01:27:35.676
Habitat modeling results right?

1631
01:27:35.676 --> 01:27:38.970
I did yes, and you thought that was

1632
01:27:38.970 --> 01:27:40.840
significant enough that you should

1633
01:27:40.840 --> 01:27:45.446
refer to that in your February 27th.

1634
01:27:45.450 --> 01:27:46.610

Report sure, that's not.

1635

01:27:46.610 --> 01:27:48.350
That's all we had and like.

1636

01:27:48.350 --> 01:27:50.238
I like I said, I don't have a

1637

01:27:50.238 --> 01:27:51.835
problem with parms model, right?

1638

01:27:51.835 --> 01:27:54.915
OK, and that and that may well have

1639

01:27:54.915 --> 01:27:57.344
been the best available information.

1640

01:27:57.344 --> 01:28:00.124
At the time, in the absence of

1641

01:28:00.124 --> 01:28:01.594
having all this field collected

1642

01:28:01.594 --> 01:28:03.196
data that you'd like to see,

1643

01:28:03.200 --> 01:28:06.629
right, that's correct.

1644

01:28:06.630 --> 01:28:09.178
Now the other thing that your supplemental

1645

01:28:09.178 --> 01:28:10.987
declaration talks about is the fact

1646

01:28:10.987 --> 01:28:13.310
that during the period of February 25th,

1647

01:28:13.310 --> 01:28:17.405
February 27th of 2020, you visited EMS

1648
01:28:17.405 --> 01:28:20.909
diversion sites on various streams.

1649
01:28:20.910 --> 01:28:22.086
Is that correct?

1650
01:28:22.086 --> 01:28:23.641
That's correct and and basically

1651
01:28:23.641 --> 01:28:25.183
what you what you say here?

1652
01:28:25.190 --> 01:28:25.966
I'm paraphrasing,

1653
01:28:25.966 --> 01:28:28.645
but correct me if I'm if I'm not

1654
01:28:28.645 --> 01:28:31.942
being fair in my paraphrasing is

1655
01:28:31.942 --> 01:28:36.310
that you the site visit confirmed

1656
01:28:36.310 --> 01:28:39.390
your previous beliefs that you'd

1657
01:28:39.390 --> 01:28:43.133
expressed in your October 30th

1658
01:28:43.133 --> 01:28:45.598
2019 declaration to the general

1659
01:28:45.598 --> 01:28:48.396
effect that version structures in

1660
01:28:48.396 --> 01:28:51.286
the streams potentially interrupt.

1661
01:28:51.286 --> 01:28:53.758

Or interrupt the malca.

1662

01:28:53.760 --> 01:28:55.979
To the sea, Mountain to the sea,

1663

01:28:55.980 --> 01:28:56.293
connectivity.

1664

01:28:56.293 --> 01:28:57.232
So you said,

1665

01:28:57.232 --> 01:29:01.170
well so I went out there and I.

1666

01:29:01.170 --> 01:29:03.034
You know this confirms what I already thought

1667

01:29:03.034 --> 01:29:05.585
and what I already said basically, right?

1668

01:29:05.585 --> 01:29:10.360
That's correct and in your.

1669

01:29:10.360 --> 01:29:13.930
In your testimony for this proceeding.

1670

01:29:16.470 --> 01:29:17.967
You mentioned, uh,

1671

01:29:17.967 --> 01:29:21.460
that I think is in paragraph 10.

1672

01:29:21.460 --> 01:29:23.612
I don't know if you have that handy,

1673

01:29:23.612 --> 01:29:26.286
but you don't. Do you have your

1674

01:29:26.286 --> 01:29:28.189
declaration and actually do it?

1675

01:29:28.190 --> 01:29:30.610

Yeah, yeah. So on page.

1676

01:29:36.020 --> 01:29:41.013

Think of page 5, which is a paragraph.

1677

01:29:41.013 --> 01:29:43.917

10 is where you start to talk about.

1678

01:29:43.920 --> 01:29:47.295

Your your 2020 E Malling site visit is that

1679

01:29:47.295 --> 01:29:51.082

right and continues then on next next page.

1680

01:29:51.082 --> 01:29:56.770

Yeah. And by the way. The.

1681

01:29:56.770 --> 01:29:59.830

The February 2020 site visit that

1682

01:29:59.830 --> 01:30:02.520

occurred prior to the trial.

1683

01:30:02.520 --> 01:30:04.669

That you testified in front of Judge

1684

01:30:04.669 --> 01:30:06.459

Crabtree or just later in 2020?

1685

01:30:06.460 --> 01:30:08.376

Is that right? That's correct, right?

1686

01:30:08.376 --> 01:30:10.040

And and since then,

1687

01:30:10.040 --> 01:30:13.267

have you done any more site visits?

1688

01:30:13.270 --> 01:30:15.568

Alright, so so so whatever testimony

1689

01:30:15.568 --> 01:30:18.190
that you're offering in this proceeding,

1690

01:30:18.190 --> 01:30:21.052
it's not based on any additional

1691

01:30:21.052 --> 01:30:24.408
site visits or field work other than

1692

01:30:24.410 --> 01:30:27.230
what's referenced in your original

1693

01:30:27.230 --> 01:30:31.230
declaration from October 30th, 2019,

1694

01:30:31.230 --> 01:30:33.414
or your supplemental declaration

1695

01:30:33.414 --> 01:30:36.144
from February 27th of 2020.

1696

01:30:36.150 --> 01:30:37.790
Is that right? That's correct,

1697

01:30:37.790 --> 01:30:43.438
alright, and so, so, so looking at the.

1698

01:30:43.440 --> 01:30:44.150
The.

1699

01:30:49.240 --> 01:30:51.607
Alright, so so at this point in a declaration

1700

01:30:51.607 --> 01:30:53.430
actually in looking at your declaration,

1701

01:30:53.430 --> 01:30:57.081
it looks like for the most part your

1702
01:30:57.081 --> 01:30:59.536
declaration is essentially covering the

1703
01:30:59.536 --> 01:31:03.380
same ground that was covered in your earlier

1704
01:31:03.380 --> 01:31:07.665
declarations until we get to paragraph 12,

1705
01:31:07.665 --> 01:31:10.875
which is when you begin to

1706
01:31:10.875 --> 01:31:14.445
provide comments on the draft.

1707
01:31:14.445 --> 01:31:17.225
Come in stream flow.

1708
01:31:17.230 --> 01:31:21.658
A summary or assessment.

1709
01:31:21.660 --> 01:31:22.680
You're saying what I'm saying?

1710
01:31:22.680 --> 01:31:26.326
Yeah, that's correct, but the alright.

1711
01:31:26.326 --> 01:31:28.890
So on page 7 getting back to page 7.

1712
01:31:31.250 --> 01:31:33.500
When you're talking about the site

1713
01:31:33.500 --> 01:31:36.459
visit that was done in February of 2020.

1714
01:31:36.460 --> 01:31:40.548
First, the second full sentence that starts.

1715
01:31:40.550 --> 01:31:45.499

Uhm, you see in all stream reaches.

1716

01:31:45.500 --> 01:31:48.770

Do you are below by?

1717

01:31:48.770 --> 01:31:52.358

Yeah, my diversion structures I conducted

1718

01:31:52.358 --> 01:31:55.439

limited visual reconnaissance in shallow

1719

01:31:55.439 --> 01:31:58.469

water above diversions when possible.

1720

01:31:58.470 --> 01:32:00.806

Walking along the streambank

1721

01:32:00.806 --> 01:32:02.558

with polarized glasses,

1722

01:32:02.560 --> 01:32:03.820

but I read that correctly.

1723

01:32:03.820 --> 01:32:04.914

That's correct.

1724

01:32:04.914 --> 01:32:08.550

Alright, so this so one site visit that

1725

01:32:08.550 --> 01:32:10.650

you've done specific to any of your

1726

01:32:10.713 --> 01:32:13.065

opinions or your testimony in this case.

1727

01:32:13.070 --> 01:32:15.754

Uhm, involved conducting what

1728

01:32:15.754 --> 01:32:19.109

you described as limited visual.

1729

01:32:19.110 --> 01:32:19.877
Reconnaissance.

1730

01:32:19.877 --> 01:32:24.479
Uh, from work walking along the

1731

01:32:24.479 --> 01:32:26.522
streambank That's right, that's correct.

1732

01:32:26.522 --> 01:32:29.210
Yeah, so you did not get into

1733

01:32:29.210 --> 01:32:32.369
the stream or do any underwater.

1734

01:32:32.370 --> 01:32:36.105
Field service know OK so but but but I

1735

01:32:36.105 --> 01:32:41.140
think you've made it very clear that your.

1736

01:32:41.140 --> 01:32:43.850
Your approach and your preference

1737

01:32:43.850 --> 01:32:46.960
would be to rely more on.

1738

01:32:46.960 --> 01:32:49.678
Underwater visual census.

1739

01:32:49.678 --> 01:32:52.322
Data correct, that's correct.

1740

01:32:52.322 --> 01:32:53.570
So so it's.

1741

01:32:53.570 --> 01:32:55.934
But you're not relying on any

1742

01:32:55.934 --> 01:32:58.450

underwater visual.

1743

01:32:58.450 --> 01:33:01.320
Census data exchange with any of your

1744

01:33:01.320 --> 01:33:04.139
opinions or testify in this case correct.

1745

01:33:04.140 --> 01:33:06.464
Well, it's just a habit of mine.

1746

01:33:06.470 --> 01:33:08.260
I mean when I get into a stream at the

1747

01:33:08.310 --> 01:33:10.146
diversion sites and I'm looking around,

1748

01:33:10.150 --> 01:33:12.810
you know I'm looking to see if I see fish.

1749

01:33:12.810 --> 01:33:14.853
And I went back and I checked my notes

1750

01:33:14.853 --> 01:33:16.807
and I actually did see three or by

1751

01:33:16.807 --> 01:33:18.856
calling up in all four four pull all

1752

01:33:18.856 --> 01:33:21.850
the stream of that diversion site.

1753

01:33:21.850 --> 01:33:22.470
Uhm?

1754

01:33:22.470 --> 01:33:25.398
So it's kind of tells me that these

1755

01:33:25.398 --> 01:33:27.540
animals are getting up there.

1756
01:33:27.540 --> 01:33:30.998
I'm not gonna mention it's a peculiar

1757
01:33:31.000 --> 01:33:32.548
physical environment because

1758
01:33:32.548 --> 01:33:34.096
of those waterfalls,

1759
01:33:34.100 --> 01:33:36.948
so we do not know how those waterfalls

1760
01:33:36.948 --> 01:33:40.070
affect migration of animals upstream.

1761
01:33:40.070 --> 01:33:41.990
You know you could be.

1762
01:33:41.990 --> 01:33:43.184
You know they could get stopped

1763
01:33:43.184 --> 01:33:44.260
like you might find fault.

1764
01:33:44.260 --> 01:33:44.770
Bicolor Wally,

1765
01:33:44.770 --> 01:33:46.300
which is usually the highest one.

1766
01:33:46.300 --> 01:33:47.460
It goes above waterfalls.

1767
01:33:47.460 --> 01:33:49.200
You might find them at lower

1768
01:33:49.263 --> 01:33:50.607
elevation in that system.

1769
01:33:50.610 --> 01:33:51.218

Don't know.

1770

01:33:51.218 --> 01:33:51.522
OK,

1771

01:33:51.522 --> 01:33:54.146
so so I'm still on page 7 still

1772

01:33:54.146 --> 01:33:55.810
in the same paragraph.

1773

01:33:55.810 --> 01:33:58.624
I'm just going to correct you

1774

01:33:58.624 --> 01:34:01.240
down a few more lines.

1775

01:34:01.240 --> 01:34:03.958
You say I observed non native

1776

01:34:03.958 --> 01:34:05.770
stream fish or macroinvertebrates

1777

01:34:05.846 --> 01:34:07.718
in perfectly good habitat.

1778

01:34:07.718 --> 01:34:10.022
Or high population densities

1779

01:34:10.022 --> 01:34:13.029
should exist in these reaches.

1780

01:34:13.030 --> 01:34:15.905
Underwater visual census and you

1781

01:34:15.905 --> 01:34:18.780
have an acronym in parentheses

1782

01:34:20.890 --> 01:34:25.244
UVC. Associated with systematic

1783
01:34:25.244 --> 01:34:28.121
bio monitoring, surveys should be

1784
01:34:28.121 --> 01:34:30.756
conducted at some future time.

1785
01:34:30.760 --> 01:34:32.625
To determine the extent to

1786
01:34:32.625 --> 01:34:35.034
which the populations of

1787
01:34:35.034 --> 01:34:37.746
native stream animals exist.

1788
01:34:37.750 --> 01:34:39.400
Uh, I read that correctly.

1789
01:34:39.400 --> 01:34:40.519
That's correct, OK?

1790
01:34:43.570 --> 01:34:48.878
So and and the type of visual limited

1791
01:34:48.878 --> 01:34:51.148
visual reconnaissance that you described.

1792
01:34:51.150 --> 01:34:53.640
Having done in February 2020 that

1793
01:34:53.640 --> 01:34:58.670
that is not a substitute for.

1794
01:34:58.670 --> 01:35:02.318
Doing underwater visual visual senses the

1795
01:35:02.318 --> 01:35:08.000
way you described no right, OK and OK.

1796
01:35:12.210 --> 01:35:14.106

Alright, so now if we move

1797

01:35:14.106 --> 01:35:16.154
forward to paragraph 12 of your

1798

01:35:16.154 --> 01:35:17.586
of your written testimony.

1799

01:35:17.590 --> 01:35:20.579
This is where this is essentially where

1800

01:35:20.579 --> 01:35:23.669
your testimony is offering something new.

1801

01:35:23.670 --> 01:35:26.760
That wasn't the subject of.

1802

01:35:26.760 --> 01:35:30.102
Your prior declarations or your testimony

1803

01:35:30.102 --> 01:35:33.936
at the trial that we had in August of 2020?

1804

01:35:33.940 --> 01:35:36.785
Because here you're reacting to the

1805

01:35:36.785 --> 01:35:40.180
draft ifsar summary from October of 2020,

1806

01:35:40.180 --> 01:35:41.599
and you're being.

1807

01:35:41.599 --> 01:35:43.018
You're basically criticizing,

1808

01:35:43.020 --> 01:35:45.267
so some of the statements and conclusions,

1809

01:35:45.270 --> 01:35:47.314
right? That's correct, alright.

1810
01:35:47.314 --> 01:35:50.280
But again, this was not based on

1811
01:35:50.280 --> 01:35:52.820
doing having any more data than

1812
01:35:52.820 --> 01:35:55.523
what you had previously, correct,

1813
01:35:55.523 --> 01:35:56.129
that's correct.

1814
01:36:02.860 --> 01:36:07.050
And it seems like the significant

1815
01:36:07.050 --> 01:36:09.772
portion of your criticism is your

1816
01:36:09.772 --> 01:36:13.770
disagreement with relying upon.

1817
01:36:13.770 --> 01:36:17.470
Habitat modeling to predict habitat

1818
01:36:17.470 --> 01:36:19.368
availability. Is that right?

1819
01:36:19.368 --> 01:36:22.070
Well, my disagreement was really with some.

1820
01:36:22.070 --> 01:36:23.750
A lot of the conclusions

1821
01:36:23.750 --> 01:36:25.094
that were being made.

1822
01:36:25.100 --> 01:36:27.010
For example, this idea of.

1823
01:36:30.190 --> 01:36:31.534

My place is natural

1824

01:36:31.534 --> 01:36:33.214
barriers to to St Movement.

1825

01:36:33.220 --> 01:36:34.580
I think there are a couple of pictures.

1826

01:36:34.580 --> 01:36:37.790
I think a current struggles showed.

1827

01:36:37.790 --> 01:36:41.698
Uhm? Uh. Conclusions like that,

1828

01:36:41.698 --> 01:36:44.330
I just had a problem with that.

1829

01:36:44.330 --> 01:36:46.906
I do not see these as barriers.

1830

01:36:46.910 --> 01:36:49.787
Come and you know what I have

1831

01:36:49.787 --> 01:36:52.411
suggested was the way I would answer

1832

01:36:52.411 --> 01:36:54.457
that question is to get diversion

1833

01:36:54.457 --> 01:36:56.638
above and below that those sites.

1834

01:36:56.638 --> 01:36:58.706
And let's see if there

1835

01:36:58.706 --> 01:37:00.696
are fish fish above them.

1836

01:37:00.700 --> 01:37:02.518
Fish and invertebrates and they are.

1837

01:37:02.520 --> 01:37:05.810

Then they're getting past it, so now.

1838

01:37:05.810 --> 01:37:08.874

I think Aaron mentioned that he did a.

1839

01:37:08.880 --> 01:37:10.878

They did do surveys like that,

1840

01:37:10.880 --> 01:37:13.286

but I didn't hear any data.

1841

01:37:13.290 --> 01:37:15.261

Results from him.

1842

01:37:15.261 --> 01:37:15.918

Correct?

1843

01:37:18.100 --> 01:37:20.338

Alright, so so.

1844

01:37:20.340 --> 01:37:22.700

Still on paragraph 12 uh,

1845

01:37:22.700 --> 01:37:25.550

uhm where you're talking about

1846

01:37:25.550 --> 01:37:28.772

the some of the comments in the

1847

01:37:28.772 --> 01:37:31.001

draft ifsar dated October 20th,

1848

01:37:31.001 --> 01:37:33.683

and in particular the conclusion that

1849

01:37:33.683 --> 01:37:36.431

quote the non petitioned stream Support

1850

01:37:36.431 --> 01:37:39.180

limited to no recruitment and existing

1851

01:37:39.180 --> 01:37:41.814
diversions have minimal impact on the

1852

01:37:41.814 --> 01:37:44.688
life history of native aquatic biota.

1853

01:37:44.688 --> 01:37:47.373
Close quote. That was you.

1854

01:37:47.373 --> 01:37:49.577
Excerpt of that quote.

1855

01:37:49.580 --> 01:37:51.765
Uhm, in paragraph 12 of

1856

01:37:51.765 --> 01:37:53.130
your testimony, correct?

1857

01:37:56.260 --> 01:37:57.838
I'm sorry. Where are you now?

1858

01:37:57.840 --> 01:38:00.000
It's it's the it's it's the last four

1859

01:38:00.000 --> 01:38:02.134
or five lines of paragraph 12 on

1860

01:38:02.134 --> 01:38:04.330
page eight of your written testimony.

1861

01:38:07.540 --> 01:38:07.970
OK.

1862

01:38:10.750 --> 01:38:13.366
Right, correct? That statement was in

1863

01:38:13.366 --> 01:38:16.578
that if Sir report and Aaron rescinded

1864

01:38:16.578 --> 01:38:20.018
that in his testimony actually.

1865

01:38:20.020 --> 01:38:21.748
He said that that's not true.

1866

01:38:21.750 --> 01:38:23.437
Based upon the new data they've collected.

1867

01:38:26.760 --> 01:38:28.812
OK, well, uh, I guess the record will speak

1868

01:38:28.812 --> 01:38:30.835
for itself in terms of what he has said,

1869

01:38:30.840 --> 01:38:32.835
but what I'd like to ask you.

1870

01:38:32.840 --> 01:38:36.368
Is in the net in last sentence of that

1871

01:38:36.368 --> 01:38:40.030
paragraph. You say in actual fact.

1872

01:38:40.030 --> 01:38:43.030
There really is no direct comprehensive

1873

01:38:43.030 --> 01:38:45.450
data to support this far.

1874

01:38:45.450 --> 01:38:47.120
Reaching conclusion that I read

1875

01:38:47.120 --> 01:38:48.462
that correctly, that's correct.

1876

01:38:48.462 --> 01:38:50.814
But as far as I can see,

1877

01:38:50.820 --> 01:38:57.190

right and and what you would, uh?

1878

01:38:57.190 --> 01:39:02.020

And when you say direct, comprehensive data.

1879

01:39:02.020 --> 01:39:04.498

What you're referring to is Dave.

1880

01:39:04.500 --> 01:39:07.068

That would have been or could

1881

01:39:07.068 --> 01:39:11.540

potentially be obtained by doing the.

1882

01:39:11.540 --> 01:39:17.020

Uh. UV. See monitoring that you've

1883

01:39:17.020 --> 01:39:21.216

described the underwater visual senses.

1884

01:39:21.216 --> 01:39:23.092

Surveys, right?

1885

01:39:23.092 --> 01:39:26.542

That's correct, but that hasn't

1886

01:39:26.542 --> 01:39:29.686

been done right now it hasn't.

1887

01:39:29.690 --> 01:39:32.106

So when you say that in actual fact

1888

01:39:32.106 --> 01:39:34.503

there is no direct comprehensive data

1889

01:39:34.503 --> 01:39:36.643

to support this far reaching conclusion,

1890

01:39:36.643 --> 01:39:38.048

that's not the same thing.

1891
01:39:38.050 --> 01:39:43.804
It's saying that the conclusion is wrong.

1892
01:39:43.810 --> 01:39:45.770
Is it?

1893
01:39:45.770 --> 01:39:47.016
I think that's what I'm saying it.

1894
01:39:47.020 --> 01:39:48.766
It's the conclusion is wrong because

1895
01:39:48.766 --> 01:39:50.590
the data is kind of sketchy.

1896
01:39:50.590 --> 01:39:52.090
The gate data is really sketchy.

1897
01:39:52.090 --> 01:39:54.407
It's not even like I haven't really

1898
01:39:54.407 --> 01:39:55.810
seen any real data.

1899
01:39:55.810 --> 01:39:57.882
You know what I'm getting is what

1900
01:39:57.882 --> 01:40:00.368
is from the door reports and what

1901
01:40:00.368 --> 01:40:02.660
they have published in those things.

1902
01:40:02.660 --> 01:40:03.383
There's palms report,

1903
01:40:03.383 --> 01:40:04.829
but I don't think he did.

1904
01:40:04.830 --> 01:40:08.174

Any server is up there in those sections.

1905

01:40:08.174 --> 01:40:12.426

You know to to prove those statements.

1906

01:40:12.426 --> 01:40:15.646

Broad reaching statement like that.

1907

01:40:15.650 --> 01:40:17.570

You need some raw data to support it,

1908

01:40:17.570 --> 01:40:20.686

and I don't see any that that exists to

1909

01:40:20.686 --> 01:40:22.900

support a broad conclusion like that

1910

01:40:22.971 --> 01:40:25.939

that the diversions aren't having any impact.

1911

01:40:25.940 --> 01:40:28.520

So, uhm.

1912

01:40:28.520 --> 01:40:32.170

And you think that the, uh?

1913

01:40:32.170 --> 01:40:34.530

The conclusions were relied

1914

01:40:34.530 --> 01:40:37.480

too heavily on habitat model.

1915

01:40:37.480 --> 01:40:38.029

Is that right?

1916

01:40:40.070 --> 01:40:46.560

That's my opinion. And I wouldn't.

1917

01:40:46.560 --> 01:40:48.670

It's easier to do that.

1918

01:40:48.670 --> 01:40:49.960

To do it that way,

1919

01:40:49.960 --> 01:40:52.507

but I would see like to see some validation

1920

01:40:52.507 --> 01:40:54.829

in those specific mountain streams.

1921

01:40:54.830 --> 01:40:56.560

This part that keeps tearing.

1922

01:40:56.560 --> 01:40:59.044

There's going to be no purely open

1923

01:40:59.044 --> 01:41:01.408

appearing or Cuomo in these these

1924

01:41:01.408 --> 01:41:05.029

places at this at this abundance.

1925

01:41:05.030 --> 01:41:06.210

I'd like to test it.

1926

01:41:06.210 --> 01:41:08.002

K Let's go in there and it's actually

1927

01:41:08.002 --> 01:41:09.826

measure and see if you're you're correct.

1928

01:41:12.930 --> 01:41:14.088

And if it works there fine,

1929

01:41:14.090 --> 01:41:16.830

it's easier to do that.

1930

01:41:16.830 --> 01:41:18.990

And it may be that the data supports

1931

01:41:18.990 --> 01:41:20.599

the conclusion when it's obtained.

1932

01:41:20.600 --> 01:41:22.170

It could be, yeah, right.

1933

01:41:22.170 --> 01:41:24.434

So so so you're not saying that the

1934

01:41:24.434 --> 01:41:26.150

conclusion can't be supported by data,

1935

01:41:26.150 --> 01:41:27.782

you're just saying that you haven't

1936

01:41:27.782 --> 01:41:29.289

seen data that supports it well,

1937

01:41:29.290 --> 01:41:31.182

especially specifically referring to

1938

01:41:31.182 --> 01:41:33.547

Aaron's suggestions like natural barriers,

1939

01:41:33.550 --> 01:41:36.115

and he showed those pictures where over

1940

01:41:36.115 --> 01:41:39.510

again pat get can't get past those.

1941

01:41:39.510 --> 01:41:41.388

All those caverns behind the falls

1942

01:41:41.388 --> 01:41:43.476

and then the question is to me is

1943

01:41:43.476 --> 01:41:45.030

how did they get undercut in the

1944

01:41:45.084 --> 01:41:46.870

first place and it's cut by water.

1945

01:41:46.870 --> 01:41:48.990
So it's sometimes that place

1946

01:41:48.990 --> 01:41:50.686
is full of water.

1947

01:41:50.690 --> 01:41:54.450
And at that it's those times at times get by.

1948

01:41:54.450 --> 01:41:55.990
You find their way around

1949

01:41:55.990 --> 01:41:58.340
things and get up in the middle.

1950

01:41:58.340 --> 01:42:00.510
Upstream off, go to go more mocha.

1951

01:42:03.000 --> 01:42:06.680
OK, and I think if we if we look at UM.

1952

01:42:06.680 --> 01:42:09.200
Just following up on that point

1953

01:42:09.200 --> 01:42:14.378
about the barriers in paragraph 13.

1954

01:42:14.380 --> 01:42:15.988
Near the end of paragraph 13,

1955

01:42:15.990 --> 01:42:20.590
which is on page 9. Uhm?

1956

01:42:20.590 --> 01:42:23.380
And then you say that

1957

01:42:23.380 --> 01:42:25.612
waterfalls and so called.

1958

01:42:25.620 --> 01:42:28.770

Natural barriers are portrayed in the

1959

01:42:28.770 --> 01:42:31.534
draft ifsar summary as impediments

1960

01:42:31.534 --> 01:42:34.494
to migrating native stream animals,

1961

01:42:34.500 --> 01:42:38.448
which in reality they are not.

1962

01:42:38.450 --> 01:42:41.282
As systematic biomonitoring surveys

1963

01:42:41.282 --> 01:42:44.822
conducted upstream of these locations

1964

01:42:44.830 --> 01:42:47.644
would reveal that I read that correctly.

1965

01:42:47.650 --> 01:42:48.950
Yeah, that's just that.

1966

01:42:48.950 --> 01:42:49.925
That's my challenge.

1967

01:42:49.930 --> 01:42:52.168
That could prove me wrong, right?

1968

01:42:52.168 --> 01:42:56.312
So, but when you say that the systematic

1969

01:42:56.312 --> 01:42:58.834
biomonitoring surveys conducted upstream

1970

01:42:58.834 --> 01:43:02.082
of these locations would reveal this,

1971

01:43:02.082 --> 01:43:04.302
aren't you presupposing what the

1972
01:43:04.302 --> 01:43:07.346
results of those surveys is going to be?

1973
01:43:07.350 --> 01:43:08.790
If this was another stream?

1974
01:43:08.790 --> 01:43:10.902
Somewhere else in onqoy.

1975
01:43:10.902 --> 01:43:13.104
You know, I would, you know,

1976
01:43:13.104 --> 01:43:15.758
pretty much bet money on it that you know.

1977
01:43:15.760 --> 01:43:18.556
We would find them up there.

1978
01:43:18.560 --> 01:43:18.886
OK.

1979
01:43:18.886 --> 01:43:20.842
Like this is this is some

1980
01:43:20.842 --> 01:43:21.820
real peculiar streams.

1981
01:43:21.820 --> 01:43:23.445
I never seen anything like

1982
01:43:23.445 --> 01:43:25.740
that actually OK so but but,

1983
01:43:25.740 --> 01:43:29.398
but in the absence of this data I mean

1984
01:43:29.400 --> 01:43:33.760
and in with the need to have to make a

1985
01:43:33.760 --> 01:43:36.585

judgment's policy judgments about how

1986

01:43:36.585 --> 01:43:38.845
to strategically target restoration.

1987

01:43:38.850 --> 01:43:41.066
If you don't have this data and this

1988

01:43:41.066 --> 01:43:43.370
will take a long time to get the data,

1989

01:43:43.370 --> 01:43:46.695
then isn't the habitat modeling

1990

01:43:46.695 --> 01:43:49.355
the best information available?

1991

01:43:49.360 --> 01:43:50.956
Then I would take a broader

1992

01:43:50.956 --> 01:43:53.642
approach and This is why I suggested

1993

01:43:53.642 --> 01:43:56.426
restoring the biggest watersheds.

1994

01:43:56.430 --> 01:43:57.642
All over, for example.

1995

01:43:57.642 --> 01:43:59.126
I mean, it's really impacted.

1996

01:43:59.126 --> 01:44:01.170
We went up there and that it's

1997

01:44:01.228 --> 01:44:02.968
it's just really dry in places,

1998

01:44:02.970 --> 01:44:04.830
but it's a big watershed,

1999

01:44:04.830 --> 01:44:06.640
has a lot of volume.

2000

01:44:06.640 --> 01:44:06.947
Uhm,

2001

01:44:06.947 --> 01:44:09.096
I think if that stream was restored,

2002

01:44:09.100 --> 01:44:10.920
there's a lot of potential for it.

2003

01:44:10.920 --> 01:44:12.498
Having a lot of beneficial effect

2004

01:44:12.498 --> 01:44:13.287
on that region.

2005

01:44:16.030 --> 01:44:17.730
Harvey, I'm not sure what

2006

01:44:17.730 --> 01:44:19.430
the status of Panavia is,

2007

01:44:19.430 --> 01:44:20.935
but Honda views one that

2008

01:44:20.935 --> 01:44:22.139
really should be restored.

2009

01:44:22.140 --> 01:44:23.939
***** **** is big springs up there.

2010

01:44:23.940 --> 01:44:25.060
It's a Big Spring system.

2011

01:44:25.060 --> 01:44:26.092
It's an important system.

2012

01:44:26.092 --> 01:44:28.481

That would be one I would suggest you know

2013

01:44:28.481 --> 01:44:30.730

if we did something like that broad stroke.

2014

01:44:30.730 --> 01:44:31.866

Take the best ones,

2015

01:44:31.866 --> 01:44:33.970

the biggest ones with the most volume

2016

01:44:33.970 --> 01:44:35.590

and restored those really well.

2017

01:44:35.590 --> 01:44:36.980

I think you would have.

2018

01:44:36.980 --> 01:44:39.428

You would go along way and

2019

01:44:39.430 --> 01:44:41.062

improving the ecology of all those

2020

01:44:41.062 --> 01:44:42.684

streams over there and not only

2021

01:44:42.684 --> 01:44:44.118

they are even on other islands,

2022

01:44:44.120 --> 01:44:47.249

Molokai for example.

2023

01:44:47.250 --> 01:44:49.734

OK so but in the meantime you know to

2024

01:44:49.734 --> 01:44:52.027

the extent that management decisions have

2025

01:44:52.027 --> 01:44:55.528

to be made about how to target restoration.

2026

01:44:55.530 --> 01:44:57.354
You you have to use the

2027

01:44:57.354 --> 01:45:00.290
information that you have, right?

2028

01:45:00.290 --> 01:45:01.242
Correct, right?

2029

01:45:01.242 --> 01:45:04.098
And and the information that's available,

2030

01:45:04.100 --> 01:45:05.680
there's some survey information.

2031

01:45:05.680 --> 01:45:08.050
And then there's the habitat modeling.

2032

01:45:08.050 --> 01:45:11.560
It's been done right, yeah?

2033

01:45:11.560 --> 01:45:13.360
And uh, and so really,

2034

01:45:13.360 --> 01:45:15.910
if you're an agency charged with

2035

01:45:15.910 --> 01:45:18.436
having to make some policy judgments.

2036

01:45:18.440 --> 01:45:18.870
I mean,

2037

01:45:18.870 --> 01:45:20.375
don't you really have no choice but

2038

01:45:20.375 --> 01:45:22.037
to consider the habitat modeling,

2039

01:45:22.040 --> 01:45:24.692

since that's part of the available

2040

01:45:24.692 --> 01:45:26.985
information and you don't have

2041

01:45:26.985 --> 01:45:29.769
this other field survey results in?

2042

01:45:29.769 --> 01:45:31.476
So sorry, yeah.

2043

01:45:31.476 --> 01:45:34.890
Well we always have the choice.

2044

01:45:34.890 --> 01:45:35.318
Well,

2045

01:45:35.318 --> 01:45:37.886
I'm gonna I'm objecting to the

2046

01:45:37.886 --> 01:45:40.550
question because it lacks foundation.

2047

01:45:40.550 --> 01:45:42.098
He's not a Commissioner.

2048

01:45:51.420 --> 01:45:53.856
He can go ahead and answer it. He's not.

2049

01:45:53.856 --> 01:45:58.858
This isn't a trial, so. OK, I mean.

2050

01:46:01.450 --> 01:46:03.370
So yeah, there isn't any data,

2051

01:46:03.370 --> 01:46:07.790
but when I'd get the data you know,

2052

01:46:07.790 --> 01:46:10.206
I think it would go along way to

2053

01:46:10.206 --> 01:46:12.368
try to validate partners model

2054

01:46:12.368 --> 01:46:14.833
in those East Maui streams.

2055

01:46:14.840 --> 01:46:17.056
I think, and I personally would feel more

2056

01:46:17.056 --> 01:46:18.699
comfortable about accepting the results.

2057

01:46:18.700 --> 01:46:19.883
But you're right, you know have to

2058

01:46:19.883 --> 01:46:21.218
go with what you have and you know,

2059

01:46:21.220 --> 01:46:24.226
I think one thing that would help is if all

2060

01:46:24.226 --> 01:46:26.518
this information were put down together.

2061

01:46:26.520 --> 01:46:28.912
It's really hard to figure out where

2062

01:46:28.912 --> 01:46:30.256
we're going from map to map looking

2063

01:46:30.256 --> 01:46:31.640
at the dish where the dish was.

2064

01:46:31.640 --> 01:46:33.672
Where do we look where the version was

2065

01:46:33.672 --> 01:46:35.674
all that if somebody went through it

2066

01:46:35.674 --> 01:46:37.650

and actually put all that together.

2067

01:46:37.650 --> 01:46:38.924

In a way that you could look

2068

01:46:38.924 --> 01:46:39.470

at it holistically.

2069

01:46:39.470 --> 01:46:40.688

I think that would help that help.

2070

01:46:40.690 --> 01:46:42.350

Like where did Barnum look?

2071

01:46:42.350 --> 01:46:43.166

Where did he sample?

2072

01:46:43.166 --> 01:46:44.390

What is he saying is in

2073

01:46:44.438 --> 01:46:45.690

particular places you know?

2074

01:46:45.690 --> 01:46:47.184

Put that together so you could

2075

01:46:47.184 --> 01:46:48.860

actually see this all in one place.

2076

01:46:48.860 --> 01:46:51.335

And then I think you'd have a chance of

2077

01:46:51.335 --> 01:46:53.130

like asking more questions about what.

2078

01:46:53.130 --> 01:46:55.008

Where should we go really well?

2079

01:46:55.010 --> 01:46:56.876

Put the effort in to actually

2080
01:46:56.876 --> 01:46:59.404
get in the water and see if we

2081
01:46:59.404 --> 01:47:01.228
can validate results and so on.

2082
01:47:01.230 --> 01:47:02.365
It's it's just really confusing

2083
01:47:02.365 --> 01:47:03.273
the way the data.

2084
01:47:03.280 --> 01:47:04.522
It's just kind of all just

2085
01:47:04.522 --> 01:47:05.350
spread out like this.

2086
01:47:09.310 --> 01:47:10.780
Could you write? Do you have you

2087
01:47:10.780 --> 01:47:12.488
have to make a decision based upon

2088
01:47:12.488 --> 01:47:14.030
what data whatever data you have,

2089
01:47:14.030 --> 01:47:15.670
and I guess that's the

2090
01:47:15.670 --> 01:47:17.266
Commission's challenge, is to.

2091
01:47:17.266 --> 01:47:19.261
I think everybody is in

2092
01:47:19.261 --> 01:47:21.198
it for the right reason.

2093
01:47:23.430 --> 01:47:25.334

And you know it's it's hard because you

2094

01:47:25.334 --> 01:47:27.377

know there are legal proceedings like this,

2095

01:47:27.380 --> 01:47:29.830

and there's sketchy data and

2096

01:47:29.830 --> 01:47:31.090

everybody is arguing about valid

2097

01:47:31.090 --> 01:47:32.660

results and that kind of thing.

2098

01:47:32.660 --> 01:47:34.356

It's just really hard to make a decision,

2099

01:47:34.360 --> 01:47:37.290

but I think we're all in the same boat here.

2100

01:47:37.290 --> 01:47:38.730

Uhm, I I personally would

2101

01:47:38.730 --> 01:47:40.170

like to see more hippo.

2102

01:47:40.170 --> 01:47:44.010

No egg operation succeed over there.

2103

01:47:44.010 --> 01:47:47.042

And they're gonna have to accept that

2104

01:47:47.042 --> 01:47:48.998

they can't get all the water they want.

2105

01:47:49.000 --> 01:47:52.378

Maybe maybe they can't, you know.

2106

01:47:52.380 --> 01:47:55.032

Got system that it just think

2107

01:47:55.032 --> 01:47:57.147
system that diversion system is

2108

01:47:57.147 --> 01:47:59.229
probably the most efficient one I've

2109

01:47:59.229 --> 01:48:01.109
ever seen anywhere in the state.

2110

01:48:01.110 --> 01:48:02.885
It's just it's designed to

2111

01:48:02.885 --> 01:48:05.030
take all the water it can.

2112

01:48:05.030 --> 01:48:06.998
And I think the farming operation

2113

01:48:06.998 --> 01:48:08.712
is finding out that there's

2114

01:48:08.712 --> 01:48:10.728
just too much volume in there.

2115

01:48:10.730 --> 01:48:15.290
So uhm, that needs to be scaled back.

2116

01:48:15.290 --> 01:48:17.358
And then in conjunction

2117

01:48:17.358 --> 01:48:19.426
in conjunction with that.

2118

01:48:19.430 --> 01:48:21.460
The streams that are going to be

2119

01:48:21.460 --> 01:48:23.229
restored need to be determined.

2120

01:48:23.230 --> 01:48:24.796

Which of these streams are going

2121

01:48:24.796 --> 01:48:26.347
to have the most beneficial

2122

01:48:26.347 --> 01:48:28.258
effect and then how do you get?

2123

01:48:28.260 --> 01:48:29.828
I don't know how you would get

2124

01:48:29.828 --> 01:48:30.949
these diversions out of there.

2125

01:48:30.950 --> 01:48:33.806
They're just. You know, there's tunnels.

2126

01:48:33.810 --> 01:48:34.494
I mean,

2127

01:48:34.494 --> 01:48:36.546
there's huge concrete structures in there,

2128

01:48:36.550 --> 01:48:38.650
you know that are impeding flow,

2129

01:48:38.650 --> 01:48:40.568
and even if you open the gates

2130

01:48:40.568 --> 01:48:42.567
which a lot of them are open.

2131

01:48:42.570 --> 01:48:43.980
You know there's still water

2132

01:48:43.980 --> 01:48:45.390
being collected in different ways.

2133

01:48:45.390 --> 01:48:47.490
They can't open the gates fully

2134

01:48:47.490 --> 01:48:50.186
and so the water is backing up and

2135

01:48:50.190 --> 01:48:51.760
we talked about mosquitoes before.

2136

01:48:51.760 --> 01:48:54.208
There's a lot of breeding area

2137

01:48:54.208 --> 01:48:56.380
around those those old gates.

2138

01:48:56.380 --> 01:48:59.508
It's a huge problem and it's gonna take

2139

01:48:59.508 --> 01:49:02.320
a collective operating to fix this fix.

2140

01:49:02.320 --> 01:49:03.553
All of this.

2141

01:49:03.553 --> 01:49:06.430
But I believe we do need diversified

2142

01:49:06.514 --> 01:49:09.868
erkens state and market bonus operation.

2143

01:49:09.870 --> 01:49:10.360
To me,

2144

01:49:10.360 --> 01:49:12.320
is one of the best examples I've ever

2145

01:49:12.381 --> 01:49:14.775
seen of of somebody doing it the right way.

2146

01:49:19.820 --> 01:49:21.240
OK, thank you Mr Cheeto.

2147

01:49:21.240 --> 01:49:22.728

I don't have any further questions.

2148

01:49:25.550 --> 01:49:27.022

Thanks baby Maui county.

2149

01:49:27.022 --> 01:49:29.860

I have no questions for this witness,

2150

01:49:29.860 --> 01:49:31.084

thank you. Mr.

2151

01:49:31.084 --> 01:49:33.124

Frank will deliver the questions.

2152

01:49:33.130 --> 01:49:35.060

Yes, thank you, Mr Keeler.

2153

01:49:35.060 --> 01:49:36.588

You just talked about.

2154

01:49:36.588 --> 01:49:38.880

Am I being the most efficient?

2155

01:49:38.880 --> 01:49:41.976

I want to make sure we get clarity there.

2156

01:49:41.980 --> 01:49:43.990

Are you saying it's most efficient

2157

01:49:43.990 --> 01:49:46.367

in terms of taking water from streams

2158

01:49:46.367 --> 01:49:49.900

or in terms of using water? Both.

2159

01:49:49.900 --> 01:49:52.476

I mean, these systems are like there

2160

01:49:52.476 --> 01:49:54.440

are redundancies in this system,

2161
01:49:54.440 --> 01:49:56.540
so I've never seen anything like it.

2162
01:49:56.540 --> 01:49:58.370
So if low goes around it,

2163
01:49:58.370 --> 01:49:59.490
or it's backed up,

2164
01:49:59.490 --> 01:50:01.340
the flows too high normally in

2165
01:50:01.340 --> 01:50:03.165
places on cooperative places the

2166
01:50:03.165 --> 01:50:05.120
water just goes over the dam,

2167
01:50:05.120 --> 01:50:07.570
but in these systems the water is

2168
01:50:07.570 --> 01:50:09.921
brought back into holding system that's

2169
01:50:09.921 --> 01:50:13.080
built into it and then recovered later on.

2170
01:50:13.080 --> 01:50:14.740
So it's really inefficient

2171
01:50:14.740 --> 01:50:16.815
and how it takes water.

2172
01:50:16.820 --> 01:50:18.385
So it's it's it's efficient

2173
01:50:18.385 --> 01:50:19.324
and capturing water,

2174
01:50:19.330 --> 01:50:21.298

but you're not testifying about how

2175

01:50:21.298 --> 01:50:23.648
it's used later on in central Mali.

2176

01:50:23.650 --> 01:50:25.730
No, I mean in an old plantation days

2177

01:50:25.730 --> 01:50:27.647
just get all the water you know,

2178

01:50:27.650 --> 01:50:29.491
put him in reservoirs and then take

2179

01:50:29.491 --> 01:50:31.626
him and put him on the cane fields.

2180

01:50:31.630 --> 01:50:33.080
It's just a new world, not right.

2181

01:50:33.080 --> 01:50:34.865
You can't do things like that anymore.

2182

01:50:34.870 --> 01:50:37.650
Yeah and.

2183

01:50:37.650 --> 01:50:40.135
Is your testimony for your

2184

01:50:40.135 --> 01:50:41.626
declaration in today?

2185

01:50:41.630 --> 01:50:43.015
Mr Sean Maestros have asked

2186

01:50:43.015 --> 01:50:44.426
about data and surveys, etc.

2187

01:50:44.426 --> 01:50:46.202
But your testimony is informed by

2188
01:50:46.202 --> 01:50:48.568
your decades of experience, correct,

2189
01:50:48.568 --> 01:50:52.658
that's correct, all right now.

2190
01:50:52.660 --> 01:50:54.928
One of the pieces of data that's

2191
01:50:54.928 --> 01:50:56.310
informed your testimony today.

2192
01:50:56.310 --> 01:50:57.634
Maybe not your declaration,

2193
01:50:57.634 --> 01:50:58.958
but in your testimony,

2194
01:50:58.960 --> 01:51:01.665
today's you heard Doctor Straub

2195
01:51:01.665 --> 01:51:04.580
testify that the data does not

2196
01:51:04.580 --> 01:51:06.476
support the conclusion anymore

2197
01:51:06.480 --> 01:51:09.114
that the quote non petition Stream

2198
01:51:09.114 --> 01:51:11.930
Support Limited to not to know

2199
01:51:11.930 --> 01:51:13.353
recruitment and existing diversions

2200
01:51:13.353 --> 01:51:15.219
have minimal impact on life history

2201
01:51:15.219 --> 01:51:17.001

of native aquatic biota, right?

2202

01:51:17.001 --> 01:51:20.410

Yeah, I was happy you did that, you know?

2203

01:51:20.410 --> 01:51:23.586

And it's that's the honest thing to do

2204

01:51:23.586 --> 01:51:26.080

'cause he they got better data now.

2205

01:51:26.080 --> 01:51:29.010

Great, now you talked about.

2206

01:51:29.010 --> 01:51:32.196

You want to take a strategic

2207

01:51:32.196 --> 01:51:33.789

approach to come.

2208

01:51:33.790 --> 01:51:37.819

Stream diversions does that strategic

2209

01:51:37.819 --> 01:51:40.484

approach up suggests that it's

2210

01:51:40.484 --> 01:51:43.709

a good idea to take 100% of the

2211

01:51:43.709 --> 01:51:45.587

base flow of whole lava stream.

2212

01:51:48.670 --> 01:51:50.534

I think he's taking 100% of

2213

01:51:50.534 --> 01:51:52.418

Baseflow is always a bad idea

2214

01:51:52.420 --> 01:51:54.860

from any stream, any stream.

2215

01:51:54.860 --> 01:51:57.060

And so you know, if you do that,

2216

01:51:57.060 --> 01:51:59.684

you basically are killing that stream, right?

2217

01:51:59.684 --> 01:52:01.882

So number one you need to know

2218

01:52:01.882 --> 01:52:03.300

determine what baseflow is.

2219

01:52:03.300 --> 01:52:05.073

It's one of the first things that you wish,

2220

01:52:05.080 --> 01:52:06.097

yes, does right?

2221

01:52:06.097 --> 01:52:08.131

Put in long term monitoring and

2222

01:52:08.131 --> 01:52:09.924

that's another thing that you

2223

01:52:09.924 --> 01:52:12.000

know eventually needs to be done.

2224

01:52:12.000 --> 01:52:13.967

It's just there's have to be really

2225

01:52:13.967 --> 01:52:15.312

good monitoring in that system

2226

01:52:15.312 --> 01:52:17.104

so we know how much water is in

2227

01:52:17.156 --> 01:52:20.036

it much the add people are using,

2228

01:52:20.036 --> 01:52:21.940

how much it's going down the stream,

2229

01:52:21.940 --> 01:52:23.278
where it's going out of that.

2230

01:52:23.280 --> 01:52:25.950
It's being monitored with today's technology.

2231

01:52:25.950 --> 01:52:27.274
It's totally all doable.

2232

01:52:27.274 --> 01:52:30.259
You could do that over multi if you want it.

2233

01:52:30.260 --> 01:52:32.834
So when you talk about a

2234

01:52:32.834 --> 01:52:34.550
balanced approach where yeah,

2235

01:52:34.550 --> 01:52:35.948
we need to provide some water

2236

01:52:35.948 --> 01:52:37.520
to central mod for agriculture,

2237

01:52:37.520 --> 01:52:40.630
everybody agrees with that sure.

2238

01:52:40.630 --> 01:52:42.922
The better the balance approach you're

2239

01:52:42.922 --> 01:52:44.854
talking about nevertheless does not

2240

01:52:44.854 --> 01:52:47.570
suggest that all the water or should

2241

01:52:47.643 --> 01:52:50.211
fit all the base flow from any streams

2242
01:52:50.211 --> 01:52:52.597
should be diverted to support that.

2243
01:52:52.600 --> 01:52:54.405
Just some of it, right? Yeah,

2244
01:52:54.405 --> 01:52:56.125
I think that would be an underlying rule.

2245
01:52:56.130 --> 01:52:56.961
Do not differ.

2246
01:52:56.961 --> 01:52:58.623
All of the base flow right?

2247
01:52:58.630 --> 01:53:01.227
And then OK, so that's one rule.

2248
01:53:01.230 --> 01:53:01.921
Uhm?

2249
01:53:01.921 --> 01:53:03.303
And, uh.

2250
01:53:03.303 --> 01:53:06.392
At some point, we're going to know

2251
01:53:06.392 --> 01:53:07.910
how much water they actually need,

2252
01:53:07.910 --> 01:53:08.323
right?

2253
01:53:08.323 --> 01:53:11.214
Uh, and then when we have that

2254
01:53:11.214 --> 01:53:13.929
number I was asking you that.

2255
01:53:13.930 --> 01:53:17.270

Once we know that number then then we

2256

01:53:17.270 --> 01:53:19.470
have a better idea of how much flow

2257

01:53:19.535 --> 01:53:21.707
needs to come through that system.

2258

01:53:21.710 --> 01:53:22.514
How do you stand?

2259

01:53:22.514 --> 01:53:25.106
The question is, how do you scale it down?

2260

01:53:25.110 --> 01:53:27.108
That system was designed to just

2261

01:53:27.108 --> 01:53:29.289
take all the water and move it.

2262

01:53:29.290 --> 01:53:30.930
Come and that's and that's

2263

01:53:30.930 --> 01:53:31.914
an engineering problem.

2264

01:53:31.920 --> 01:53:34.034
Like how do you scale that back?

2265

01:53:34.040 --> 01:53:36.026
And in the process determined which

2266

01:53:36.026 --> 01:53:38.060
are the best streams to restore,

2267

01:53:38.060 --> 01:53:40.094
and in those streams take all

2268

01:53:40.094 --> 01:53:41.450
of this infrastructure out.

2269
01:53:41.450 --> 01:53:44.418
Just try to return it back to natural.

2270
01:53:44.420 --> 01:53:48.090
Come and then but still try to keep

2271
01:53:48.090 --> 01:53:50.190
as much water as my phone needs,

2272
01:53:50.190 --> 01:53:51.702
you know?

2273
01:53:51.702 --> 01:53:53.214
Reasonably needs,

2274
01:53:53.214 --> 01:53:55.310
so it's not an easy problem.

2275
01:53:55.310 --> 01:53:57.896
This is a really difficult problem.

2276
01:53:57.900 --> 01:53:59.916
Does it make sense to take more

2277
01:53:59.916 --> 01:54:01.620
water from these streams from,

2278
01:54:01.620 --> 01:54:02.310
let's say,

2279
01:54:02.310 --> 01:54:04.035
the dozen streams and yellow,

2280
01:54:04.040 --> 01:54:06.020
for which there is no meaningful

2281
01:54:06.020 --> 01:54:07.010
in stream flow?

2282
01:54:07.010 --> 01:54:08.975

Standard doesn't make sense to

2283

01:54:08.975 --> 01:54:11.519
take more water from the streams

2284

01:54:11.519 --> 01:54:14.295
before the analysis of the impacts

2285

01:54:14.295 --> 01:54:16.570
of the ecological and recreational

2286

01:54:16.649 --> 01:54:18.779
use of those streams is done,

2287

01:54:18.780 --> 01:54:21.215
which is what water Commission

2288

01:54:21.215 --> 01:54:23.163
staff is doing now.

2289

01:54:23.170 --> 01:54:24.906
I don't have to do this concurrently,

2290

01:54:24.910 --> 01:54:25.774
I think, yeah,

2291

01:54:25.774 --> 01:54:28.070
'cause it's just a moving target right now.

2292

01:54:28.070 --> 01:54:29.636
We don't know how much water

2293

01:54:29.636 --> 01:54:30.419
they're gonna need.

2294

01:54:30.420 --> 01:54:30.882
You know,

2295

01:54:30.882 --> 01:54:32.730
we know maximum flow in the ditch system,

2296
01:54:32.730 --> 01:54:34.704
but there's no idea of thought

2297
01:54:34.704 --> 01:54:36.450
how to scale it back.

2298
01:54:36.450 --> 01:54:39.300
Where do you scale it back?

2299
01:54:39.300 --> 01:54:40.038
It's just problem.

2300
01:54:40.038 --> 01:54:41.760
It used to be worked on from

2301
01:54:41.815 --> 01:54:43.439
all these different approaches.

2302
01:54:43.440 --> 01:54:46.430
This different angles I think.

2303
01:54:46.430 --> 01:54:50.000
Doesn't, is it strategic too?

2304
01:54:50.000 --> 01:54:52.360
Take water from streams completely,

2305
01:54:52.360 --> 01:54:55.034
do water them and put them in

2306
01:54:55.040 --> 01:54:56.840
reservoirs Milo, miles away,

2307
01:54:56.840 --> 01:54:59.993
from which all the water essentially seeks

2308
01:54:59.993 --> 01:55:03.032
down into the aquifer in central Mali. Yeah,

2309
01:55:03.032 --> 01:55:05.636

that's the old plantation style right now,

2310

01:55:05.640 --> 01:55:07.376
and it occurs on all the islands.

2311

01:55:07.380 --> 01:55:09.039
So take the water from the stream,

2312

01:55:09.040 --> 01:55:11.508
put in a reservoir, hold it the reservoir.

2313

01:55:11.508 --> 01:55:13.328
Always. It's a bad idea.

2314

01:55:13.330 --> 01:55:14.002
Like you say,

2315

01:55:14.002 --> 01:55:16.140
there's a lot of loss from the reservoir,

2316

01:55:16.140 --> 01:55:18.764
the water standing there for a long time.

2317

01:55:18.770 --> 01:55:21.695
On and from what I've heard from my point,

2318

01:55:21.700 --> 01:55:23.380
was approaches you know they want

2319

01:55:23.380 --> 01:55:25.748
to use it as they get it and not

2320

01:55:25.748 --> 01:55:27.670
rely so much on the reservoirs.

2321

01:55:27.670 --> 01:55:29.554
So I think there is reservoirs

2322

01:55:29.554 --> 01:55:30.810
need to be decommissioned.

2323
01:55:30.810 --> 01:55:33.258
This is really no reason to do that,

2324
01:55:33.260 --> 01:55:34.652
but in the meantime,

2325
01:55:34.652 --> 01:55:36.740
because there's so much flow coming

2326
01:55:36.806 --> 01:55:38.606
out of that diversion system.

2327
01:55:38.610 --> 01:55:40.140
You know there needs to be

2328
01:55:40.140 --> 01:55:40.905
some holding capacity.

2329
01:55:40.910 --> 01:55:42.720
I think in the interim,

2330
01:55:42.720 --> 01:55:44.480
so I don't think you can get rid

2331
01:55:44.480 --> 01:55:46.510
of all the reservoirs immediately,

2332
01:55:46.510 --> 01:55:47.854
but I think the idea would

2333
01:55:47.854 --> 01:55:49.679
be to try to phase them out.

2334
01:55:49.680 --> 01:55:53.370
OK, and in your sense of using

2335
01:55:53.370 --> 01:55:55.110
stream water strategically,

2336
01:55:55.110 --> 01:55:59.150

'cause it also makes sense to come.

2337

01:55:59.150 --> 01:56:02.685

Uh, require the use or use of.

2338

01:56:02.690 --> 01:56:05.890

Use groundwater, assuming that there's

2339

01:56:05.890 --> 01:56:09.958

no data suggesting their salinity issues.

2340

01:56:09.960 --> 01:56:11.972

Groundwater should also always

2341

01:56:11.972 --> 01:56:13.984

be safe for drinking.

2342

01:56:13.990 --> 01:56:15.922

I don't think you should ever think

2343

01:56:15.922 --> 01:56:17.510

about using groundwater for irrigation.

2344

01:56:17.510 --> 01:56:20.070

That has to always be drinking in it.

2345

01:56:20.070 --> 01:56:22.086

You know, as the climate gets drier,

2346

01:56:22.090 --> 01:56:24.110

which is which is happening.

2347

01:56:24.110 --> 01:56:26.465

We're going to need that groundwater to

2348

01:56:26.465 --> 01:56:28.535

supply drinking water to the populations,

2349

01:56:28.540 --> 01:56:28.985

right?

2350

01:56:28.985 --> 01:56:31.210
So I wouldn't touch that.

2351

01:56:31.210 --> 01:56:33.650
OK, that should be the couple we just.

2352

01:56:33.650 --> 01:56:36.555
You know all groundwater should use would

2353

01:56:36.555 --> 01:56:40.990
be protected and only used for drinking.

2354

01:56:40.990 --> 01:56:41.358
Alright,

2355

01:56:41.358 --> 01:56:43.198
thank you no further questions.

2356

01:56:45.960 --> 01:56:48.384
Thanks David. Yes I I have

2357

01:56:48.384 --> 01:56:50.000
a couple questions come.

2358

01:56:50.000 --> 01:56:53.353
Mr Quito, you were talking about potential

2359

01:56:53.353 --> 01:56:56.738
for species above and below areas that

2360

01:56:56.738 --> 01:57:00.469
are identified as natural barriers.

2361

01:57:00.470 --> 01:57:03.284
Uhm? And I'm I'm wondering if you've

2362

01:57:03.284 --> 01:57:05.776
ever heard of anybody introducing

2363

01:57:05.776 --> 01:57:08.766

species above a natural barrier.

2364

01:57:08.770 --> 01:57:11.094

Oh yeah, there's there are people that

2365

01:57:11.094 --> 01:57:12.980

introducing stuff all over the state.

2366

01:57:12.980 --> 01:57:15.844

I think it's an effort to try to.

2367

01:57:15.850 --> 01:57:18.286

Introduce he via steam people trying to

2368

01:57:18.286 --> 01:57:21.090

do that, but in that particular place

2369

01:57:21.090 --> 01:57:24.159

I don't know if anybody doing that.

2370

01:57:24.160 --> 01:57:26.110

And I think in that particular

2371

01:57:26.110 --> 01:57:28.139

place that he that he showed,

2372

01:57:28.140 --> 01:57:30.060

there may be ways around it,

2373

01:57:30.060 --> 01:57:31.460

you know, little tributaries or

2374

01:57:31.460 --> 01:57:33.240

other ways that animals can get by,

2375

01:57:33.240 --> 01:57:34.780

get around that, but.

2376

01:57:34.780 --> 01:57:36.888

You know, if you look at those photos,

2377

01:57:36.890 --> 01:57:38.670
those are like really flow

2378

01:57:38.670 --> 01:57:40.094
low flow that summertime,

2379

01:57:40.100 --> 01:57:41.689
not there hasn't been raining for awhile.

2380

01:57:41.690 --> 01:57:43.730
It's in a draw.

2381

01:57:43.730 --> 01:57:44.552
But uh.

2382

01:57:44.552 --> 01:57:46.736
I would be surprised if that whole

2383

01:57:46.736 --> 01:57:48.716
bowl doesn't fill up with water

2384

01:57:48.716 --> 01:57:52.348
when it's flooding in high flood.

2385

01:57:52.350 --> 01:57:55.190
So if if if someone were to introduce

2386

01:57:55.190 --> 01:57:57.976
a species above a natural barrier that

2387

01:57:57.976 --> 01:58:00.810
needs to migrate for its lifecycle.

2388

01:58:00.810 --> 01:58:03.250
Uh, what? What would happen?

2389

01:58:03.250 --> 01:58:06.208
I mean, would it survive above

2390

01:58:06.208 --> 01:58:08.959

the natural or would you be?

2391

01:58:08.960 --> 01:58:09.998

Would you be?

2392

01:58:09.998 --> 01:58:12.074

How would you figure out if

2393

01:58:12.074 --> 01:58:14.530

it's actually a natural barrier?

2394

01:58:14.530 --> 01:58:14.770

Well,

2395

01:58:14.770 --> 01:58:16.210

like I mentioned that what was

2396

01:58:16.210 --> 01:58:18.108

the way I would look at it would

2397

01:58:18.108 --> 01:58:20.071

be I would bring the guys in and

2398

01:58:20.071 --> 01:58:21.376

then we would go downstream.

2399

01:58:21.380 --> 01:58:22.730

You know models.

2400

01:58:22.730 --> 01:58:25.430

So go upstream above those diversions

2401

01:58:25.430 --> 01:58:28.246

amount that that barrier amount or so.

2402

01:58:28.250 --> 01:58:30.410

Set up our framework and and

2403

01:58:30.410 --> 01:58:31.850

just get the data.

2404

01:58:31.850 --> 01:58:33.680

And see if we see anything.

2405

01:58:33.680 --> 01:58:36.500

If we see populations of native

2406

01:58:36.500 --> 01:58:38.380

animals above the barrier,

2407

01:58:38.380 --> 01:58:41.236

then obviously they're getting past it.

2408

01:58:41.240 --> 01:58:44.248

But if they if they get past it.

2409

01:58:46.330 --> 01:58:48.134

By intentional introduction as

2410

01:58:48.134 --> 01:58:49.938

opposed to natural migration,

2411

01:58:49.940 --> 01:58:50.966

how we don't just live there.

2412

01:58:50.970 --> 01:58:53.024

I don't live in there, you know.

2413

01:58:53.024 --> 01:58:53.780

And if they,

2414

01:58:53.780 --> 01:58:56.937

they could get trapped in a ditch.

2415

01:58:56.940 --> 01:59:01.788

Oh intake somewhere that could happen.

2416

01:59:01.790 --> 01:59:03.270

They would just live their life out there,

2417

01:59:03.270 --> 01:59:05.766

but you know the these fish

2418

01:59:05.766 --> 01:59:08.319
are motivated to go up Malka.

2419

01:59:08.320 --> 01:59:09.300
Once they get inside,

2420

01:59:09.300 --> 01:59:11.451
they are just driven to go find their

2421

01:59:11.451 --> 01:59:13.329
preferred habitat up in the mountains,

2422

01:59:13.330 --> 01:59:15.805
and when they encounter a

2423

01:59:15.805 --> 01:59:17.785
barrier like a waterfall.

2424

01:59:17.790 --> 01:59:19.680
Uhm, I think they just lived there

2425

01:59:19.680 --> 01:59:22.006
all dot life right there and I

2426

01:59:22.006 --> 01:59:24.862
think that's why I think I saw.

2427

01:59:24.870 --> 01:59:29.665
On or pie calling reported fairly low.

2428

01:59:29.670 --> 01:59:30.801
In these streams,

2429

01:59:30.801 --> 01:59:32.309
so it could be,

2430

01:59:32.310 --> 01:59:34.151
they just found the barrier like a

2431
01:59:34.151 --> 01:59:35.809
waterfall and they couldn't go past

2432
01:59:35.809 --> 01:59:37.720
and they finished their life up there.

2433
01:59:37.720 --> 01:59:40.128
Thanks and my other question is did,

2434
01:59:40.130 --> 01:59:43.362
did you read the 2018 sea Worm Decision

2435
01:59:43.362 --> 01:59:45.804
Commission on Water Resource Management

2436
01:59:45.804 --> 01:59:48.708
decision on the East Maui Streams?

2437
01:59:48.710 --> 01:59:49.044
Ah,

2438
01:59:49.044 --> 01:59:52.050
I'm not sure it's David sent that to me.

2439
01:59:52.050 --> 01:59:54.039
I've read a lot of stuff I can't remember.

2440
01:59:56.230 --> 01:59:58.450
Already country.

2441
01:59:58.450 --> 02:00:00.739
Tell you whether it did or not.

2442
02:00:00.740 --> 02:00:04.232
So are are you aware that in the decision

2443
02:00:04.232 --> 02:00:07.682
the Commissioners did weigh a lot

2444
02:00:07.682 --> 02:00:10.460

of the questions that you're asking?

2445

02:00:10.460 --> 02:00:11.412

I would hope so.

2446

02:00:11.412 --> 02:00:13.420

I guess I maybe I didn't see that,

2447

02:00:13.420 --> 02:00:14.620

but I would hope they are.

2448

02:00:14.620 --> 02:00:17.311

They need to. OK,

2449

02:00:17.311 --> 02:00:21.319

and and when when these decisions are made?

2450

02:00:21.320 --> 02:00:23.290

I mean what you're describing

2451

02:00:23.290 --> 02:00:25.787

is sort of best possible data

2452

02:00:25.787 --> 02:00:28.037

versus best available data what.

2453

02:00:28.040 --> 02:00:30.500

What's the right?

2454

02:00:30.500 --> 02:00:32.411

These are the decisions supposed to be

2455

02:00:32.411 --> 02:00:34.758

made on the best available information.

2456

02:00:34.760 --> 02:00:36.279

You know. You can always collect data,

2457

02:00:36.280 --> 02:00:37.820

that's thing right, you know.

2458

02:00:37.820 --> 02:00:39.420
And what existing information

2459

02:00:39.420 --> 02:00:41.020
does point you to?

2460

02:00:41.020 --> 02:00:43.336
What other questions to ask, sure,

2461

02:00:43.336 --> 02:00:44.904
but at a point in time you have

2462

02:00:44.904 --> 02:00:46.659
a certain amount of information.

2463

02:00:46.660 --> 02:00:51.548
Is that right? Yeah, right, but.

2464

02:00:51.550 --> 02:00:54.006
If I was a decision maker decision maker

2465

02:00:54.006 --> 02:00:56.754
and I got I was at that sad juncture,

2466

02:00:56.760 --> 02:00:58.184
I would send guys up there and look.

2467

02:01:01.640 --> 02:01:02.423
Because, you know,

2468

02:01:02.423 --> 02:01:04.639
I really don't know if that's right or not.

2469

02:01:04.640 --> 02:01:06.502
You know, we won't know until we

2470

02:01:06.502 --> 02:01:08.320
actually get some real data from it.

2471

02:01:08.320 --> 02:01:09.480

OK, that's all I have.

2472

02:01:09.480 --> 02:01:11.916
Thank you very much, thank you.

2473

02:01:11.920 --> 02:01:14.040
Alright, I think that's brings

2474

02:01:14.040 --> 02:01:18.317
us to a closest Mr. Key to Mr.

2475

02:01:18.317 --> 02:01:20.339
Key to its first of all,

2476

02:01:20.340 --> 02:01:22.810
let me just mark the time here, it is 1103.

2477

02:01:22.810 --> 02:01:26.168
Thank you very, very much. Thank you.

2478

02:01:26.170 --> 02:01:29.131
Now you're free to stay and turn off your

2479

02:01:29.131 --> 02:01:31.634
video and audio if you want just just,

2480

02:01:31.634 --> 02:01:33.506
but thank you for your time.

2481

02:01:33.510 --> 02:01:36.170
We really appreciate it.

2482

02:01:36.170 --> 02:01:39.410
OK, so we have left Mr Lindner this

2483

02:01:39.410 --> 02:01:42.740
morning so shall we take a 5 minute break

2484

02:01:42.740 --> 02:01:45.880
and then we will continue with him.

2485

02:01:45.880 --> 02:01:47.050
Right, thank you.

2486

02:07:31.350 --> 02:07:34.387
OK, I think we're ready. Uhm,

2487

02:07:34.387 --> 02:07:38.216
we're going to proceed with Mr Lindner.

2488

02:07:38.220 --> 02:07:42.514
Is your court reporter ready? I am here.

2489

02:07:42.514 --> 02:07:45.982
Thank you sorry thanks and Linda Chow.

2490

02:07:45.982 --> 02:07:50.150
Would you please swear in our witness?

2491

02:07:53.480 --> 02:07:56.040
Yeah good morning Mr Lindner.

2492

02:07:56.040 --> 02:07:58.592
Do you want it? Do you solemnly swear

2493

02:07:58.592 --> 02:08:00.961
to tell the truth, the whole truth,

2494

02:08:00.961 --> 02:08:02.546
and nothing but the truth?

2495

02:08:02.550 --> 02:08:06.182
Yes, thank you OK, and it's for the

2496

02:08:06.182 --> 02:08:09.700
record it's 11:09 AM and Mr Linder.

2497

02:08:09.700 --> 02:08:13.494
If you would just introduce yourself and.

2498

02:08:13.500 --> 02:08:16.338

Mr. Roat uh, he's your witness.

2499

02:08:19.010 --> 02:08:20.438

Thank you Mr. Linder,

2500

02:08:20.438 --> 02:08:22.223

could you please introduce yourself

2501

02:08:22.223 --> 02:08:24.099

and tell us what your position

2502

02:08:24.099 --> 02:08:25.800

with the county of Maui is?

2503

02:08:25.800 --> 02:08:27.756

Yes, my name is Tony Linder.

2504

02:08:27.760 --> 02:08:29.788

I'm the water treatment

2505

02:08:29.788 --> 02:08:31.309

plants division manager.

2506

02:08:33.460 --> 02:08:37.460

Thank you and just as a procedural matter,

2507

02:08:37.460 --> 02:08:40.412

can I just confirm that everybody

2508

02:08:40.412 --> 02:08:43.502

received a copy of Exhibit Z10

2509

02:08:43.502 --> 02:08:46.556

which we emailed out on Friday?

2510

02:08:49.280 --> 02:08:50.969

Yes, thank you.

2511

02:08:53.520 --> 02:08:56.752

Mr. Linder did you sign and submit a

2512
02:08:56.752 --> 02:08:59.364
declaration in this case? Yes it is.

2513
02:08:59.364 --> 02:09:01.520
And do you stand by the statements

2514
02:09:01.595 --> 02:09:03.620
made in that declaration? Yes.

2515
02:09:05.630 --> 02:09:08.132
Uhm, I I'd like to go through a couple

2516
02:09:08.132 --> 02:09:10.392
of exhibits at the county submitted

2517
02:09:10.392 --> 02:09:13.565
just to try and explain them a little

2518
02:09:13.565 --> 02:09:15.965
bit because they're not entirely clear.

2519
02:09:15.970 --> 02:09:19.234
I'm going to try and screen share what's

2520
02:09:19.234 --> 02:09:23.589
been marked as the county's exhibit C7.

2521
02:09:23.590 --> 02:09:24.916
Let me pull that up now.

2522
02:09:34.970 --> 02:09:37.920
Are you able to see that? Yes.

2523
02:09:41.650 --> 02:09:44.714
Could you tell us what this document is?

2524
02:09:44.720 --> 02:09:47.280
This is a report that we produce daily.

2525
02:09:47.280 --> 02:09:51.200

It's we call it the upcountry water report.

2526

02:09:51.200 --> 02:09:54.672

It reflects water draw,

2527

02:09:54.672 --> 02:09:58.459

storage and usage. Thank you uhm?

2528

02:10:01.660 --> 02:10:04.756

So there's I see that there's a demand

2529

02:10:04.756 --> 02:10:08.226

portion on there to the kind of right of it.

2530

02:10:11.250 --> 02:10:12.414

And it refers.

2531

02:10:12.414 --> 02:10:14.742

There's a column that says Como

2532

02:10:14.742 --> 02:10:17.823

Le Homme is that the camogli we're

2533

02:10:17.823 --> 02:10:20.839

treatment plant for the county of Maui.

2534

02:10:20.840 --> 02:10:23.420

OK, thank you and then.

2535

02:10:23.420 --> 02:10:25.382

If you look a little bit to the right,

2536

02:10:25.390 --> 02:10:27.863

there's a PE WH. Oh and oh, Linda,

2537

02:10:27.863 --> 02:10:29.978

that's referring to the Piolot

2538

02:10:29.978 --> 02:10:32.185

water treatment plant and the

2539
02:10:32.185 --> 02:10:33.957
Olinda Water treatment plant.

2540
02:10:33.960 --> 02:10:35.148
Is that correct?

2541
02:10:35.148 --> 02:10:37.490
That's correct, yeah.

2542
02:10:37.490 --> 02:10:41.783
Uh, and then if you look to the right,

2543
02:10:41.790 --> 02:10:43.726
there's something that says,

2544
02:10:43.726 --> 02:10:48.590
uh, pumping up, could you?

2545
02:10:48.590 --> 02:10:52.188
Explain other there's two that refer Cola,

2546
02:10:52.190 --> 02:10:55.790
2 lowerline and cola 2P WH.

2547
02:10:55.790 --> 02:10:57.482
Oh could you just kind of

2548
02:10:57.482 --> 02:10:59.080
tell us what that means?

2549
02:10:59.080 --> 02:11:01.630
Sure, Steve.

2550
02:11:01.630 --> 02:11:03.989
The Compara camogli to the lower lying

2551
02:11:03.989 --> 02:11:07.220
is the amount of water that the kamoli

2552
02:11:07.220 --> 02:11:09.233

treatment facility produced, and.

2553

02:11:09.233 --> 02:11:14.294

Pump up to the lower coolant system.

2554

02:11:14.300 --> 02:11:18.090

That's the pilot service area.

2555

02:11:18.090 --> 02:11:20.795

We call the kamoli treatment

2556

02:11:20.795 --> 02:11:23.388

plant the medical service area,

2557

02:11:23.388 --> 02:11:25.948

so there are times when

2558

02:11:25.948 --> 02:11:29.499

Camogli needs to supplement.

2559

02:11:29.500 --> 02:11:32.685

Lower cool RP A whole service area.

2560

02:11:32.690 --> 02:11:34.440

Uhm?

2561

02:11:34.440 --> 02:11:36.680

So that water will go directly into

2562

02:11:36.680 --> 02:11:39.148

the system at the higher elevations.

2563

02:11:39.150 --> 02:11:41.658

About Mark Wall and.

2564

02:11:44.060 --> 02:11:47.060

It supplies the distribution system lines,

2565

02:11:47.060 --> 02:11:51.729

it supplies tanks and they access water.

2566
02:11:51.730 --> 02:11:55.846
Would go to the Kamoli Tapiola reservoir.

2567
02:11:55.850 --> 02:11:58.378
Well you'll see that column in the middle.

2568
02:12:01.380 --> 02:12:04.537
So. If camogli treatment plan is on,

2569
02:12:04.540 --> 02:12:06.805
typically the PLO raw water

2570
02:12:06.805 --> 02:12:08.617
reservoir levels are dropping,

2571
02:12:08.620 --> 02:12:11.396
and so it's a means to supplement that

2572
02:12:11.396 --> 02:12:13.908
water at the PLO Waterton facility.

2573
02:12:17.850 --> 02:12:21.689
I'd I'd like you to look so at the top it

2574
02:12:21.689 --> 02:12:26.620
looks like there's a date of June 22nd, 2021.

2575
02:12:26.620 --> 02:12:32.542
Uhm, and if you look to the right it

2576
02:12:32.542 --> 02:12:36.256
shows a pumping to the lower line of

2577
02:12:36.260 --> 02:12:40.228
0.9 MG dionda pumping to the PE Hollow

2578
02:12:40.228 --> 02:12:44.076
reservoir of 0.6 MG D you see that yes,

2579
02:12:44.080 --> 02:12:47.248

OK and then if you look to the bottom

2580

02:12:47.250 --> 02:12:54.120

June 28th it says that pumping to the

2581

02:12:54.120 --> 02:12:57.390

lower line is 3.6 million gallons a day.

2582

02:12:57.390 --> 02:12:59.819

And pumping to the PU Haul Reserve

2583

02:12:59.819 --> 02:13:02.030

is 2.1 million gallons a day.

2584

02:13:02.030 --> 02:13:04.950

Uh, so that's significantly higher.

2585

02:13:04.950 --> 02:13:07.206

Can you tell us what accounts

2586

02:13:07.206 --> 02:13:08.334

for that difference?

2587

02:13:08.340 --> 02:13:10.450

Well, if you look at the 622 date,

2588

02:13:10.450 --> 02:13:13.420

what you see is the .9 and the .6.

2589

02:13:13.420 --> 02:13:14.716

That to me indicates.

2590

02:13:14.716 --> 02:13:17.067

A partial day so the high lift

2591

02:13:17.067 --> 02:13:19.426

pumps that move the water up into

2592

02:13:19.426 --> 02:13:21.465

that those regions is probably

2593
02:13:21.465 --> 02:13:24.039
initiated some point during the day.

2594
02:13:24.040 --> 02:13:26.326
It's not a full 24 hour

2595
02:13:26.326 --> 02:13:27.850
run cycle reflected there.

2596
02:13:27.850 --> 02:13:29.380
If you go all the way down to the bottom,

2597
02:13:29.380 --> 02:13:32.278
what you see is a full 24 hour section,

2598
02:13:32.280 --> 02:13:34.710
so this would indicate to me

2599
02:13:34.710 --> 02:13:37.220
that the Piolin reservoirs or

2600
02:13:37.220 --> 02:13:40.370
start getting to the point where.

2601
02:13:40.370 --> 02:13:42.030
They're low enough to

2602
02:13:42.030 --> 02:13:43.690
need to be supplemented.

2603
02:13:43.690 --> 02:13:46.640
So back to your question,

2604
02:13:46.640 --> 02:13:49.270
the top is is the beginning

2605
02:13:49.270 --> 02:13:51.070
of the initiation of that,

2606
02:13:51.070 --> 02:13:52.390

and as you can see,

2607

02:13:52.390 --> 02:13:54.119
as you go down through the chart,

2608

02:13:54.120 --> 02:13:57.389
you can see the water levels increase.

2609

02:13:57.390 --> 02:13:59.790
So that's that's all about meeting

2610

02:13:59.790 --> 02:14:02.416
the demand in the lower coolest

2611

02:14:02.416 --> 02:14:04.296
system and also supplementing

2612

02:14:04.296 --> 02:14:07.490
water in the peel whole reservoir.

2613

02:14:07.490 --> 02:14:09.938
Well, we anticipate needing.

2614

02:14:09.940 --> 02:14:12.196
And then. Sorry could you please?

2615

02:14:12.200 --> 02:14:15.080
OK so so we what we're seeing is just

2616

02:14:15.080 --> 02:14:18.400
a dry dry time there with no water

2617

02:14:18.400 --> 02:14:21.460
reflect or we don't anticipate rain.

2618

02:14:21.460 --> 02:14:23.020
So we try to get ahead of that.

2619

02:14:23.020 --> 02:14:26.380
We don't want to drain reservoirs.

2620
02:14:26.380 --> 02:14:30.148
And then if you you kind of look

2621
02:14:30.148 --> 02:14:34.058
up to the PE Hello demand column

2622
02:14:34.060 --> 02:14:37.144
from the three point 1 to the 1.7,

2623
02:14:37.144 --> 02:14:39.864
that also indicates a decrease

2624
02:14:39.864 --> 02:14:42.580
in production during this time.

2625
02:14:42.580 --> 02:14:44.790
Is that correct? Yes, OK.

2626
02:14:48.330 --> 02:14:52.206
And again, that's that's what is.

2627
02:14:52.210 --> 02:14:53.308
What is the cause of that?

2628
02:14:53.310 --> 02:14:54.702
Could you tell us?

2629
02:14:54.702 --> 02:14:56.442
While they appear whole wrong,

2630
02:14:56.450 --> 02:14:58.130
water reservoirs 50 million gallon

2631
02:14:58.130 --> 02:15:00.137
reservoir and that plant can make

2632
02:15:00.137 --> 02:15:01.739
up to 8,000,000 gallons a day.

2633
02:15:01.740 --> 02:15:05.972

So we can draw that 50 million gallons

2634

02:15:05.972 --> 02:15:10.788
down fast and so during drought conditions.

2635

02:15:10.790 --> 02:15:13.772
When we have enough water available at

2636

02:15:13.772 --> 02:15:16.064
camogli to supply the makalah system,

2637

02:15:16.064 --> 02:15:18.865
we can also supplement where we are losing

2638

02:15:18.865 --> 02:15:21.079
ground in the lower cooling system.

2639

02:15:23.930 --> 02:15:26.140
OK, now looking again at

2640

02:15:26.140 --> 02:15:29.880
the June 28th date, uhm?

2641

02:15:29.880 --> 02:15:34.146
It says by demand under Komola

2642

02:15:34.150 --> 02:15:36.920
4.6 million gallons a day.

2643

02:15:36.920 --> 02:15:40.336
And then if you then look to pumping,

2644

02:15:40.340 --> 02:15:42.235
it says 3.6 million gallons

2645

02:15:42.235 --> 02:15:45.027
a day to the lower line and

2646

02:15:45.027 --> 02:15:47.047
two point 1,000,000 gallons a

2647

02:15:47.047 --> 02:15:49.829
day to the PE Ho low reserve.

2648

02:15:51.980 --> 02:15:54.290
So if you if you add the 3.6 to

2649

02:15:54.290 --> 02:15:56.334
the two point one, that's 5.7,

2650

02:15:56.334 --> 02:15:59.428
so that's higher than that first column.

2651

02:15:59.430 --> 02:16:02.195
Can you just kind of explain to

2652

02:16:02.195 --> 02:16:05.180
us what that what that reflects?

2653

02:16:05.180 --> 02:16:07.852
Yeah, this this is an old chart that

2654

02:16:07.852 --> 02:16:10.780
we use for those that see it daily.

2655

02:16:10.780 --> 02:16:12.308
We have a pretty good understanding of it,

2656

02:16:12.310 --> 02:16:14.005
but what's happening there is

2657

02:16:14.005 --> 02:16:15.700
that you'll see under pookela.

2658

02:16:15.700 --> 02:16:18.988
Well, there's 1.3 million was produced.

2659

02:16:18.990 --> 02:16:22.638
That water is included into that demand told,

2660

02:16:22.640 --> 02:16:28.880

so the 3.6 and the 2.1 also includes the 1.3.

2661

02:16:28.880 --> 02:16:31.330

That's why it's more than 4.6 the Puka

2662

02:16:31.330 --> 02:16:33.310

well water is above the treatment

2663

02:16:33.310 --> 02:16:35.387

plan above the pumping station.

2664

02:16:35.390 --> 02:16:37.080

But it's always been included

2665

02:16:37.080 --> 02:16:39.020

when we talk about Phase 10,

2666

02:16:39.020 --> 02:16:41.246

which is what you're describing here.

2667

02:16:41.250 --> 02:16:44.430

So there's that other 1.3 million.

2668

02:16:44.430 --> 02:16:50.118

Thank you uhm? And so I I.

2669

02:16:50.120 --> 02:16:51.970

I guess.

2670

02:16:51.970 --> 02:16:54.140

Are there ever situations in

2671

02:16:54.140 --> 02:16:56.869

which either the PE Hollow or

2672

02:16:56.869 --> 02:16:59.239

theolinda plant might be offline?

2673

02:16:59.240 --> 02:17:01.116

Yes, that can happen.

2674

02:17:01.116 --> 02:17:04.489

And what what would the result of

2675

02:17:04.489 --> 02:17:07.723

usage at the KAMOLI we're facility be?

2676

02:17:07.730 --> 02:17:11.054

Well under under either of those

2677

02:17:11.054 --> 02:17:13.270

scenarios Komoly we're treatment

2678

02:17:13.362 --> 02:17:15.408

plant becomes essential.

2679

02:17:15.410 --> 02:17:18.650

Uhm, it, it's a.

2680

02:17:18.650 --> 02:17:21.240

If you, let's say for instance we

2681

02:17:21.240 --> 02:17:23.610

lose the oglinda treatment plant.

2682

02:17:23.610 --> 02:17:24.013

Uhm,

2683

02:17:24.013 --> 02:17:26.431

the peel whole treatment plant would

2684

02:17:26.431 --> 02:17:29.407

have to provide the water for a percula.

2685

02:17:29.410 --> 02:17:29.724

Uhm,

2686

02:17:29.724 --> 02:17:31.922

that means that it would have a

2687

02:17:31.922 --> 02:17:33.743

more difficult time meeting the

2688

02:17:33.743 --> 02:17:35.628
demand and lower cooling system.

2689

02:17:35.630 --> 02:17:37.770
And that's where camogli water

2690

02:17:37.770 --> 02:17:39.910
treatment plant and phase ten.

2691

02:17:39.910 --> 02:17:42.052
What we call Phase 10 pumping

2692

02:17:42.052 --> 02:17:43.123
comes into play.

2693

02:17:43.130 --> 02:17:44.425
The same thing is true with me.

2694

02:17:44.430 --> 02:17:47.126
All the PLO is the largest producing plant.

2695

02:17:47.130 --> 02:17:48.606
We rely heavily on the whole.

2696

02:17:48.610 --> 02:17:50.320
That's why we protect those

2697

02:17:50.320 --> 02:17:51.688
raw water reservoir levels.

2698

02:17:51.690 --> 02:17:53.720
And sometimes we do it by moving

2699

02:17:53.720 --> 02:17:55.687
water not only into the lower

2700

02:17:55.687 --> 02:17:57.412
cooling system from camogli but

2701
02:17:57.412 --> 02:17:59.649
also into the raw water reservoir.

2702
02:17:59.650 --> 02:18:00.103
Uhm,

2703
02:18:00.103 --> 02:18:02.821
if we lost piajo we would

2704
02:18:02.821 --> 02:18:04.783
become completely dependent on

2705
02:18:04.783 --> 02:18:06.847
camogli water treatment plant.

2706
02:18:06.850 --> 02:18:08.405
To supply not only mock

2707
02:18:08.405 --> 02:18:11.490
law but lower coolant OK.

2708
02:18:11.490 --> 02:18:11.864
Uhm,

2709
02:18:11.864 --> 02:18:15.820
I'd like to talk a little bit about how water

2710
02:18:15.820 --> 02:18:19.320
gets to the komoly weird treatment plant.

2711
02:18:19.320 --> 02:18:20.940
Thought waters from the Wailoa ditch.

2712
02:18:20.940 --> 02:18:22.080
Is that correct?

2713
02:18:22.080 --> 02:18:22.840
That's correct,

2714
02:18:22.840 --> 02:18:23.326

OK,

2715

02:18:23.326 --> 02:18:26.242
I'm going to share what's been

2716

02:18:26.242 --> 02:18:29.050
marked as the county's exhibit 10.

2717

02:18:31.430 --> 02:18:32.680
Uhm?

2718

02:18:35.030 --> 02:18:36.356
Or I will try to sorry.

2719

02:18:41.090 --> 02:18:45.010
Did you mean Z10 sorrisi 10 yes.

2720

02:18:45.010 --> 02:18:48.664
Uhm? I don't know why this is not

2721

02:18:48.664 --> 02:18:49.819
pulling up, sorry about that.

2722

02:19:25.500 --> 02:19:26.148
There we go.

2723

02:19:29.710 --> 02:19:31.978
Is everybody able to see that?

2724

02:19:31.980 --> 02:19:36.460
Yes. OK, and so that could you

2725

02:19:36.460 --> 02:19:39.500
tell us what this picture is of?

2726

02:19:39.500 --> 02:19:42.532
Well, this is what we call the kamoli

2727

02:19:42.532 --> 02:19:44.978
for Bay up to the right of the picture.

2728

02:19:44.980 --> 02:19:47.647

Was is where the water comes in.

2729

02:19:47.650 --> 02:19:51.835

Uh, and it's all part of the wailoa ditch.

2730

02:19:51.840 --> 02:19:56.914

Uhm? We the area where you see the 24 inch

2731

02:19:56.914 --> 02:19:59.300

opening to komoly water treatment plant,

2732

02:19:59.300 --> 02:20:01.554

there's a red arrow that's pointing down.

2733

02:20:01.560 --> 02:20:04.888

We have a 24 inch inlet pipe there.

2734

02:20:04.890 --> 02:20:06.660

It's flush with the concrete

2735

02:20:06.660 --> 02:20:09.249

on the side wall of the ditch.

2736

02:20:09.250 --> 02:20:12.512

Uhm, and then you beyond that is

2737

02:20:12.512 --> 02:20:15.606

the water that goes to my portal

2738

02:20:15.606 --> 02:20:18.860

and to the to the egg park.

2739

02:20:18.860 --> 02:20:22.136

So when you say beyond that you mean there,

2740

02:20:22.140 --> 02:20:24.912

there's an arrow that's pointing to

2741

02:20:24.912 --> 02:20:27.161

Mahi Pono screen you're referring to,

2742

02:20:27.161 --> 02:20:29.170

I guess to the to the left

2743

02:20:29.236 --> 02:20:31.103

of the picture there, right?

2744

02:20:31.103 --> 02:20:32.269

Yes, OK.

2745

02:20:38.540 --> 02:20:42.756

And so when it the portion that says

2746

02:20:42.760 --> 02:20:48.410

24 inch opening to komoly, we're up.

2747

02:20:48.410 --> 02:20:53.018

Is that referring to the entry point that?

2748

02:20:53.020 --> 02:20:55.306

The water goes from the forebay

2749

02:20:55.306 --> 02:20:56.830

into the treatment plant.

2750

02:20:56.830 --> 02:20:59.483

Yes. OK, and can you tell us

2751

02:20:59.483 --> 02:21:01.800

how that gate is operated?

2752

02:21:01.800 --> 02:21:03.410

Well, there's a gate there.

2753

02:21:03.410 --> 02:21:05.210

It's not typically operated,

2754

02:21:05.210 --> 02:21:08.374

it's a wheel valve that you you

2755

02:21:08.374 --> 02:21:10.648
can't really see it too well.

2756

02:21:10.650 --> 02:21:12.546
The side arrow that says from only four,

2757

02:21:12.550 --> 02:21:14.646
but pretty much points to where it is.

2758

02:21:14.650 --> 02:21:17.597
That's more or less than isolation point.

2759

02:21:17.600 --> 02:21:20.246
If we want to work on the traveling screen,

2760

02:21:20.250 --> 02:21:22.250
you can sort of see the traveling screen.

2761

02:21:22.250 --> 02:21:23.900
It looks like an upright structure.

2762

02:21:26.670 --> 02:21:31.197
So if if we needed to drain the channel.

2763

02:21:31.200 --> 02:21:32.766
Maybe let channel which includes the

2764

02:21:32.766 --> 02:21:34.619
bottom portion of the traveling screen.

2765

02:21:34.620 --> 02:21:37.286
We would close that gate that

2766

02:21:37.286 --> 02:21:39.166
you see there that Wheelgate

2767

02:21:39.170 --> 02:21:41.036
typically doesn't need to be closed.

2768

02:21:41.040 --> 02:21:43.938

If the treatment plant is shut down,

2769

02:21:43.940 --> 02:21:46.358

there's an actuated valve beyond everything

2770

02:21:46.358 --> 02:21:49.271

that you see here at the physical

2771

02:21:49.271 --> 02:21:51.737

entrance to the treatment plant process,

2772

02:21:51.740 --> 02:21:56.100

that Valve has an actuator on it in and it

2773

02:21:56.206 --> 02:21:59.212

will open and close with the initiation

2774

02:21:59.212 --> 02:22:01.258

of the treatment plan, so there's.

2775

02:22:01.258 --> 02:22:03.262

There's a little bit of redundancy

2776

02:22:03.262 --> 02:22:05.030

there which basically makes the

2777

02:22:05.030 --> 02:22:06.760

valve that we're looking at.

2778

02:22:06.760 --> 02:22:09.135

Simply used to isolate the

2779

02:22:09.135 --> 02:22:11.035

traveling screen for maintenance.

2780

02:22:11.040 --> 02:22:13.158

And this this may sound like

2781

02:22:13.158 --> 02:22:14.217

a silly question,

2782
02:22:14.220 --> 02:22:17.258
but when you referring to opening and

2783
02:22:17.258 --> 02:22:20.633
closing a you mean water coming in and

2784
02:22:20.633 --> 02:22:22.897
then cutting off the water from coming in,

2785
02:22:22.900 --> 02:22:23.582
right? Yeah,

2786
02:22:23.582 --> 02:22:26.310
let's say the Kamali planet is shut down,

2787
02:22:26.310 --> 02:22:27.542
as is off well,

2788
02:22:27.542 --> 02:22:29.910
the valve at the beginning of the

2789
02:22:29.910 --> 02:22:32.135
process with the treatment process,

2790
02:22:32.140 --> 02:22:34.474
which is beyond the raw water

2791
02:22:34.474 --> 02:22:36.030
traveling screen it closes.

2792
02:22:36.030 --> 02:22:38.217
OK, so there is no water going into the

2793
02:22:38.217 --> 02:22:41.460
treatment plant when the plant's not online.

2794
02:22:41.460 --> 02:22:43.620
There's no flow through.

2795
02:22:43.620 --> 02:22:44.198

OK,

2796

02:22:44.198 --> 02:22:49.400

thank you and does EMI or the county operate?

2797

02:22:49.400 --> 02:22:52.560

I guess that that valve or that that

2798

02:22:52.560 --> 02:22:55.678

shut off system no, no they don't.

2799

02:22:55.678 --> 02:22:59.209

So would it be the county then yes,

2800

02:22:59.210 --> 02:22:59.660

OK.

2801

02:23:01.940 --> 02:23:05.300

Uhm? And so when water goes from the

2802

02:23:05.300 --> 02:23:08.567

four Bay into the treatment plant,

2803

02:23:08.570 --> 02:23:09.470

how does it get there?

2804

02:23:09.470 --> 02:23:12.758

Is it by gravity or is it pumped?

2805

02:23:12.760 --> 02:23:14.944

Well, it's gravity to a certain extent.

2806

02:23:14.950 --> 02:23:17.302

The treatment plant is below this

2807

02:23:17.302 --> 02:23:19.140

picture that we're looking at,

2808

02:23:19.140 --> 02:23:21.708

but there are feed pumps to

2809

02:23:21.710 --> 02:23:23.600
prior to the filtration units,

2810

02:23:23.600 --> 02:23:25.952
and so when they come on there they

2811

02:23:25.952 --> 02:23:27.367
would essentially be pulling the

2812

02:23:27.367 --> 02:23:29.540
water to that the flow setpoint

2813

02:23:29.540 --> 02:23:31.554
for the treatment facility OK?

2814

02:23:31.554 --> 02:23:34.032
Uhm, and so does there need to

2815

02:23:34.032 --> 02:23:36.718
be a certain amount of water

2816

02:23:36.718 --> 02:23:39.550
in this for Bay to maintain?

2817

02:23:39.550 --> 02:23:42.406
I guess pressure in order to drive

2818

02:23:42.406 --> 02:23:45.638
the water into the treatment facility.

2819

02:23:45.640 --> 02:23:47.716
Well, in my discussions with the

2820

02:23:47.716 --> 02:23:49.577
Operation staff that run this

2821

02:23:49.577 --> 02:23:51.229
facility and the supervisors,

2822

02:23:51.230 --> 02:23:53.427

they all seem to agree that, UM.

2823

02:23:53.427 --> 02:23:56.626

When the flow the registered flow in

2824

02:23:56.626 --> 02:24:00.508

the Wailoa ditch against the seven million,

2825

02:24:00.510 --> 02:24:03.100

that becomes.

2826

02:24:03.100 --> 02:24:04.860

That's that's what they consider

2827

02:24:04.860 --> 02:24:07.680

to be a low point operationally.

2828

02:24:07.680 --> 02:24:09.735

They can still process water

2829

02:24:09.735 --> 02:24:12.550

at that elevation, but.

2830

02:24:12.550 --> 02:24:15.245

There's other factors that come into play.

2831

02:24:15.250 --> 02:24:18.382

This 4 Bay that you see here can become

2832

02:24:18.382 --> 02:24:21.908

sort of a collection area for sedimentation.

2833

02:24:21.910 --> 02:24:24.205

So the lower levels that the ditch is at,

2834

02:24:24.210 --> 02:24:25.595

the higher probability that we

2835

02:24:25.595 --> 02:24:27.353

might pull some of the sediment

2836
02:24:27.353 --> 02:24:29.237
from the bottom into the process.

2837
02:24:29.240 --> 02:24:31.394
So 7,000,000 is is pretty much

2838
02:24:31.394 --> 02:24:34.006
the number that we would hope to

2839
02:24:34.006 --> 02:24:36.202
not go lower than as operators.

2840
02:24:36.210 --> 02:24:37.874
And injury to case.

2841
02:24:37.874 --> 02:24:38.706
I mean,

2842
02:24:38.710 --> 02:24:41.230
I think this information is very interesting.

2843
02:24:41.230 --> 02:24:43.010
It's a little frustrating that

2844
02:24:43.010 --> 02:24:44.790
this information was not provided

2845
02:24:44.849 --> 02:24:46.129
in a written statement.

2846
02:24:46.130 --> 02:24:49.028
Which was required to be provided.

2847
02:24:49.030 --> 02:24:52.516
Uhm, it's not really fair to us.

2848
02:24:52.520 --> 02:24:54.025
That this information is being

2849
02:24:54.025 --> 02:24:55.530

sprung at the last minute?

2850

02:24:55.530 --> 02:24:56.012
I mean,

2851

02:24:56.012 --> 02:24:57.458
I can't deny that it's not

2852

02:24:57.458 --> 02:24:58.999
interesting and maybe even important,

2853

02:24:59.000 --> 02:25:00.064
but it's not appropriate.

2854

02:25:00.064 --> 02:25:01.660
And if this is going to,

2855

02:25:01.660 --> 02:25:02.692
I don't know how many more

2856

02:25:02.692 --> 02:25:05.022
questions you have, Mr Rowe, but.

2857

02:25:05.022 --> 02:25:06.996
You know, I asked.

2858

02:25:06.996 --> 02:25:09.294
Long time ago that you haven't

2859

02:25:09.294 --> 02:25:10.820
provided witness statement,

2860

02:25:10.820 --> 02:25:12.422
you provided the briefest of statements

2861

02:25:12.422 --> 02:25:14.248
and now you're going way beyond that.

2862

02:25:14.250 --> 02:25:15.554
It's your own witness,

2863
02:25:15.554 --> 02:25:17.510
and this just doesn't seem fair.

2864
02:25:17.510 --> 02:25:18.218
So I,

2865
02:25:18.218 --> 02:25:20.696
I guess I I'd like to know.

2866
02:25:20.700 --> 02:25:22.848
How much more testimony is going

2867
02:25:22.848 --> 02:25:24.280
to be elicited here?

2868
02:25:24.280 --> 02:25:27.432
And I would like to take a significant

2869
02:25:27.432 --> 02:25:30.000
break so that we are going to have

2870
02:25:30.000 --> 02:25:32.176
an opportunity to assess this stuff

2871
02:25:32.176 --> 02:25:34.516
to be able to formulate questions.

2872
02:25:34.520 --> 02:25:37.467
Uhm, I'm I'm very close to done.

2873
02:25:37.470 --> 02:25:42.066
Uhm, and also this the testimony

2874
02:25:42.066 --> 02:25:45.130
that I'm asking is.

2875
02:25:45.130 --> 02:25:45.818
Uh.

2876
02:25:45.818 --> 02:25:46.506

Yeah,

2877

02:25:46.506 --> 02:25:48.570
I I guess.

2878

02:25:48.570 --> 02:25:51.120
There were questions asked of Mr

2879

02:25:51.120 --> 02:25:53.652
Vagt regarding the operations of the

2880

02:25:53.652 --> 02:25:55.537
water treatment facility and the

2881

02:25:55.537 --> 02:25:58.050
amount of water that was necessary,

2882

02:25:58.050 --> 02:26:02.052
so this is responsive to through

2883

02:26:02.052 --> 02:26:04.890
those questions I'm I'm allowed

2884

02:26:04.890 --> 02:26:05.890
rebuttal testimony.

2885

02:26:05.890 --> 02:26:07.640
This is responsive to that.

2886

02:26:13.440 --> 02:26:16.470
OK, please continue. Thank you.

2887

02:26:21.970 --> 02:26:24.287
So you mentioned 7,000,000 gallons a day,

2888

02:26:24.290 --> 02:26:29.367
UM, and just to be clear, you said that.

2889

02:26:29.367 --> 02:26:33.800
After it passes that screen to the left,

2890

02:26:33.800 --> 02:26:37.948
it goes to the Cool Egg park

2891

02:26:37.948 --> 02:26:39.254
and then elsewhere, right?

2892

02:26:39.254 --> 02:26:41.378
That's the way I understand it.

2893

02:26:41.380 --> 02:26:45.750
Yes, OK? I, that's that's the end

2894

02:26:45.750 --> 02:26:48.990
of my questioning, thank you.

2895

02:26:48.990 --> 02:26:50.154
And I will sorry,

2896

02:26:50.154 --> 02:26:51.300
I'll stop sharing, you know.

2897

02:26:54.130 --> 02:26:54.580
Alright.

2898

02:26:57.480 --> 02:26:59.880
Who would be next? Is it Mr Frankel

2899

02:26:59.880 --> 02:27:02.970
or Mr Schumer, Mr. Full list?

2900

02:27:02.970 --> 02:27:04.680
Alright, you wanna go ahead?

2901

02:27:06.800 --> 02:27:10.466
Uh, yes. David Schulmeister here for

2902

02:27:10.466 --> 02:27:13.531
Alexander and Baldwin and EMI and

2903

02:27:13.531 --> 02:27:15.078

I'm just going to help the record.

2904

02:27:15.080 --> 02:27:18.320
It still live in 2829.

2905

02:27:18.320 --> 02:27:22.340
Right, so so based on an I'm looking.

2906

02:27:22.340 --> 02:27:24.909
I'm still looking at Exhibit Z tab.

2907

02:27:24.910 --> 02:27:27.709
Would you like me to pull that back up?

2908

02:27:27.710 --> 02:27:29.674
We got a yeah.

2909

02:27:29.674 --> 02:27:32.800
Let me try and Nope, that's not it.

2910

02:27:35.800 --> 02:27:36.350
Sorry.

2911

02:27:54.240 --> 02:27:54.530
There.

2912

02:27:58.100 --> 02:28:02.850
Can everybody see that now? Yep, OK,

2913

02:28:02.850 --> 02:28:05.180
OK, so just I just want to make sure I

2914

02:28:05.244 --> 02:28:07.694
understand this and the record is clear.

2915

02:28:07.700 --> 02:28:10.025
So when and what we're

2916

02:28:10.025 --> 02:28:12.350
looking at here this is.

2917

02:28:12.350 --> 02:28:14.289

All of the water that we see.

2918

02:28:14.290 --> 02:28:19.050

That's water in the weird structure itself.

2919

02:28:19.050 --> 02:28:21.474

Yes, that's that's the wailoa ditch for Bay.

2920

02:28:21.480 --> 02:28:23.751

That's what we typically call that, right?

2921

02:28:23.751 --> 02:28:28.079

So so the so when it's in the

2922

02:28:28.079 --> 02:28:30.684

forebay is is it? I mean it.

2923

02:28:30.684 --> 02:28:32.352

It's just all commingled in terms

2924

02:28:32.352 --> 02:28:34.448

of if This is why this is going to

2925

02:28:34.448 --> 02:28:36.606

go to my opponents or the ag park,

2926

02:28:36.610 --> 02:28:38.488

or go to the community treatment

2927

02:28:38.488 --> 02:28:40.530

plant while it's in the forebay.

2928

02:28:40.530 --> 02:28:43.290

It's all. It's just one aggregate.

2929

02:28:43.290 --> 02:28:46.279

Commingled amount of water is that right?

2930

02:28:46.280 --> 02:28:47.430

That's right.

2931

02:28:47.430 --> 02:28:52.030

And to the extent that water then gets.

2932

02:28:52.030 --> 02:28:55.982

Delivered to the kamoli

2933

02:28:55.982 --> 02:28:58.946

water treatment plant.

2934

02:28:58.950 --> 02:29:01.606

That it just as long as I have

2935

02:29:01.606 --> 02:29:04.498

gate is open 24 inch open.

2936

02:29:04.498 --> 02:29:07.199

Then what controls whether the water

2937

02:29:07.199 --> 02:29:09.320

goes or or how much water goes,

2938

02:29:09.320 --> 02:29:12.647

is the inlet valve that's controlled

2939

02:29:12.647 --> 02:29:13.538

by the county?

2940

02:29:13.538 --> 02:29:14.429

Is that right?

2941

02:29:14.430 --> 02:29:15.160

That's right,

2942

02:29:15.160 --> 02:29:18.416

so so it's not as if EMI, you know,

2943

02:29:18.416 --> 02:29:20.504

segregates or delivers any particular amount

2944
02:29:20.504 --> 02:29:23.010
of this commingled water to the county.

2945
02:29:23.010 --> 02:29:25.090
The county actually controls how

2946
02:29:25.090 --> 02:29:27.710
much it draws from the weird.

2947
02:29:27.710 --> 02:29:29.174
Is that correct?

2948
02:29:29.174 --> 02:29:30.150
That's correct,

2949
02:29:30.150 --> 02:29:30.520
alright?

2950
02:29:35.540 --> 02:29:38.738
And so you know, sometimes the.

2951
02:29:38.740 --> 02:29:40.945
Well, now let me just I think I'm done.

2952
02:29:40.950 --> 02:29:42.350
I have no further questions.

2953
02:29:44.670 --> 02:29:50.800
All right, Mr Frankel. OK, uhm.

2954
02:29:50.800 --> 02:29:58.700
Mr Linder stop yes. Uhm?

2955
02:29:58.700 --> 02:30:00.420
You don't know you don't monitor how much

2956
02:30:00.420 --> 02:30:02.414
water the cooler AG Park uses, right?

2957
02:30:02.414 --> 02:30:05.110

That's not your kuliana.

2958

02:30:05.110 --> 02:30:10.198

Well, there is a department of water supply.

2959

02:30:10.200 --> 02:30:13.733

Manage. Facility, I suppose,

2960

02:30:13.733 --> 02:30:15.257

but not my group.

2961

02:30:15.260 --> 02:30:16.828

So you don't monitor how much water they

2962

02:30:16.828 --> 02:30:18.932

use on a daily basis or anything, right?

2963

02:30:18.932 --> 02:30:21.220

No, I don't OK,

2964

02:30:21.220 --> 02:30:25.408

so I I want to ask you what Mr Rose just

2965

02:30:25.408 --> 02:30:28.730

asking about the the 7,000,000 gallons a day.

2966

02:30:28.730 --> 02:30:30.565

Come, you're not taking 7,000,000

2967

02:30:30.565 --> 02:30:31.666

gallons a day.

2968

02:30:31.670 --> 02:30:34.326

The point is you need to have 7,000,000

2969

02:30:34.326 --> 02:30:36.927

gallons a day in the wailoa ditch

2970

02:30:36.927 --> 02:30:39.441

flowing by the kamoli treatment where in

2971
02:30:39.441 --> 02:30:41.532
order to get sufficient pressure, right?

2972
02:30:41.532 --> 02:30:44.178
That's true, OK.

2973
02:30:44.180 --> 02:30:45.937
In what is the we've heard conflicting

2974
02:30:45.937 --> 02:30:47.899
customer a little bit conflicting testimony.

2975
02:30:47.900 --> 02:30:51.092
What is the maximum capacity of

2976
02:30:51.092 --> 02:30:53.522
the kamoli treatment plant to

2977
02:30:53.522 --> 02:30:56.018
treat water in a daily basis?

2978
02:30:56.020 --> 02:30:58.900
But they mostly country?

2979
02:30:58.900 --> 02:31:00.160
6.12 million gallons a day.

2980
02:31:03.170 --> 02:31:07.690
Thank you. Uhm, OK.

2981
02:31:07.690 --> 02:31:10.578
You don't have a reservoir at the community.

2982
02:31:10.580 --> 02:31:12.740
We're treatment plant, do you, no?

2983
02:31:12.740 --> 02:31:15.120
Uhm, is there room to build one?

2984
02:31:15.120 --> 02:31:18.978

If if you wanted to? That's I don't.

2985

02:31:18.978 --> 02:31:20.715
I don't, I don't know I wouldn't

2986

02:31:20.715 --> 02:31:22.100
be able to answer that question.

2987

02:31:22.100 --> 02:31:24.611
I'm asking so you don't.

2988

02:31:24.611 --> 02:31:26.719
You don't know like we just saw that photo.

2989

02:31:26.720 --> 02:31:28.400
It's sort of a limited photo.

2990

02:31:28.400 --> 02:31:29.776
I've never been there.

2991

02:31:29.776 --> 02:31:32.140
I mean is there is there no?

2992

02:31:32.140 --> 02:31:35.820
I mean is it like built from pin to pin?

2993

02:31:35.820 --> 02:31:38.025
Or is there room somewhere along there

2994

02:31:38.025 --> 02:31:40.586
to where you could store water or not?

2995

02:31:40.590 --> 02:31:42.814
Well, I can only speak to the fence

2996

02:31:42.814 --> 02:31:45.186
line at the facility that I manage,

2997

02:31:45.190 --> 02:31:47.155
and right now inside that

2998

02:31:47.155 --> 02:31:49.120
fence line there isn't OK,

2999

02:31:49.120 --> 02:31:51.136
but I don't know if the county has

3000

02:31:51.136 --> 02:31:52.897
access to other parcels or not.

3001

02:31:52.900 --> 02:31:55.217
That's just not part of my responsibility.

3002

02:31:55.220 --> 02:31:57.492
I understand I understand,

3003

02:31:57.492 --> 02:32:00.166
so there are three water treatment facilities

3004

02:32:00.166 --> 02:32:03.011
that serve up country my residence, right?

3005

02:32:03.011 --> 02:32:07.037
Yes Sir, Camogli, Piola and Linda.

3006

02:32:07.040 --> 02:32:07.837
Right?

3007

02:32:07.837 --> 02:32:13.416
Uhm, NP Hollow and Olinda have reservoirs.

3008

02:32:13.420 --> 02:32:13.742
Yes.

3009

02:32:13.742 --> 02:32:16.640
Uhm, and in that chart we saw that Mr

3010

02:32:16.722 --> 02:32:19.863
Rowe put up on the screen that we shared.

3011

02:32:19.870 --> 02:32:21.802

I saw that the pee hole

3012

02:32:21.802 --> 02:32:23.090
reservoir is actually named,

3013

02:32:23.090 --> 02:32:25.306
but there's two reservoirs

3014

02:32:25.306 --> 02:32:28.620
that service Olinda, right?

3015

02:32:28.620 --> 02:32:31.934
Uhm, yes there are. Yes, that's right.

3016

02:32:31.934 --> 02:32:33.819
And do they have names?

3017

02:32:33.820 --> 02:32:34.268
Yes.

3018

02:32:34.268 --> 02:32:36.060
What are their names?

3019

02:32:36.060 --> 02:32:39.300
You have the white boy reservoirs

3020

02:32:39.300 --> 02:32:40.448
and you have cockapoo.

3021

02:32:43.240 --> 02:32:46.950
And those are those are identified on.

3022

02:32:46.950 --> 02:32:48.900
Those charts that Mr. Robot posted

3023

02:32:48.900 --> 02:32:50.979
right put up on the screen.

3024

02:32:53.050 --> 02:32:55.219
I I don't I have to refer back to

3025

02:32:55.219 --> 02:32:56.979
their not being close proximity

3026

02:32:56.979 --> 02:32:59.163
to the treatment plant in Olinda.

3027

02:32:59.170 --> 02:33:01.318
They are further in I understand

3028

02:33:01.318 --> 02:33:03.873
I'm just saying on that table that

3029

02:33:03.873 --> 02:33:06.330
that Mr Rowe talked with you about

3030

02:33:06.330 --> 02:33:08.904
had various columns and where those

3031

02:33:08.904 --> 02:33:11.210
reservoirs identified in those columns.

3032

02:33:11.210 --> 02:33:13.610
Yes they are OK. OK, thank you.

3033

02:33:13.610 --> 02:33:15.290
I'm sorry I misunderstood your question.

3034

02:33:15.290 --> 02:33:18.234
OK now the reservoir at Piolo has a

3035

02:33:18.234 --> 02:33:21.007
capacity of about 50 million gallons.

3036

02:33:21.010 --> 02:33:23.330
Is that right? 50 yes.

3037

02:33:23.330 --> 02:33:26.697
And the reservoirs that service to Linda

3038

02:33:26.697 --> 02:33:29.780

have a capacity of about 1300 gallons.

3039

02:33:29.780 --> 02:33:31.070

Is that right?

3040

02:33:31.070 --> 02:33:32.444

100 million yes.

3041

02:33:32.444 --> 02:33:35.192

100 million and 30 or combined.

3042

02:33:35.200 --> 02:33:37.385

100 hundred million at talk

3043

02:33:37.385 --> 02:33:39.570

about 30 million at Whitemoor.

3044

02:33:45.090 --> 02:33:48.210

And. The county keeps track of the water,

3045

02:33:48.210 --> 02:33:51.796

water water levels at those three reservoirs,

3046

02:33:51.796 --> 02:33:57.200

right? Yes they do on a daily basis, yes.

3047

02:33:57.200 --> 02:34:00.170

So you have an idea ahead of time when

3048

02:34:00.170 --> 02:34:02.779

the pee hole Oundle indoor facilities

3049

02:34:02.779 --> 02:34:06.078

may be starting to run low on water.

3050

02:34:06.080 --> 02:34:10.193

At Olinda that PR whole all we have is

3051

02:34:10.193 --> 02:34:11.748

the 50 million gallon reservoir which

3052
02:34:11.748 --> 02:34:14.239
like I said we can draw that down fast.

3053
02:34:14.240 --> 02:34:21.726
OK, but uhm. You so how much do you use jet?

3054
02:34:21.730 --> 02:34:24.355
Usually use that on a daily basis

3055
02:34:24.355 --> 02:34:27.130
at UM P Hollow.

3056
02:34:27.130 --> 02:34:30.770
You know those around 4,000,000 a day?

3057
02:34:30.770 --> 02:34:33.326
OK, so you have an idea.

3058
02:34:33.330 --> 02:34:35.376
When water levels at P hollow

3059
02:34:35.376 --> 02:34:37.668
are starting to run low.

3060
02:34:37.668 --> 02:34:42.308
Yes. OK, so for all.

3061
02:34:42.310 --> 02:34:45.310
Uhm, for all three reservoirs,

3062
02:34:45.310 --> 02:34:48.118
you have an idea ahead of time when

3063
02:34:48.118 --> 02:34:50.468
water may be starting to run low.

3064
02:34:50.470 --> 02:34:55.498
Uhm? How long in advance?

3065
02:34:55.500 --> 02:34:58.650

Do you have a an idea that low water levels?

3066

02:34:58.650 --> 02:34:59.222

Here dropping?

3067

02:34:59.222 --> 02:35:01.510

We might need two in a few days.

3068

02:35:01.510 --> 02:35:02.008

Well, I won't.

3069

02:35:02.008 --> 02:35:03.170

I won't give you a time frame.

3070

02:35:03.170 --> 02:35:06.032

We might need some water at

3071

02:35:06.032 --> 02:35:07.940

the kamoli treatment weird.

3072

02:35:07.940 --> 02:35:11.076

OK, first thing we need to do is

3073

02:35:11.076 --> 02:35:13.028

differentiate between the upper Kula.

3074

02:35:13.030 --> 02:35:15.790

Reservoirs and the lower cooler reservoir,

3075

02:35:15.790 --> 02:35:16.274

piolo.

3076

02:35:16.274 --> 02:35:18.210

They are not interconnected.

3077

02:35:18.210 --> 02:35:19.735

Department of Health has deemed

3078

02:35:19.735 --> 02:35:21.670

those to be different source waters,

3079
02:35:21.670 --> 02:35:23.782
so you cannot include the 130

3080
02:35:23.782 --> 02:35:26.066
million at a percula when you

3081
02:35:26.066 --> 02:35:28.076
talk about production at Piolo.

3082
02:35:28.080 --> 02:35:31.460
OK, we do we operators.

3083
02:35:31.460 --> 02:35:33.285
We make weather predictions as

3084
02:35:33.285 --> 02:35:36.070
best we can as best anybody can.

3085
02:35:36.070 --> 02:35:37.230
And as you say,

3086
02:35:37.230 --> 02:35:39.094
we do try to anticipate additional

3087
02:35:39.094 --> 02:35:41.578
water coming in during drought periods.

3088
02:35:41.580 --> 02:35:43.640
It's very difficult and we

3089
02:35:43.640 --> 02:35:46.296
absolutely need the support and the

3090
02:35:46.296 --> 02:35:48.396
redundancy that CAMOGLI provides.

3091
02:35:48.400 --> 02:35:51.914
But we it's a completely separate system.

3092
02:35:51.920 --> 02:35:53.960

Upper Kula and lower cooler.

3093

02:35:53.960 --> 02:35:55.355
They're completely separate.

3094

02:35:55.355 --> 02:35:58.145
I understand my question though is.

3095

02:35:58.150 --> 02:36:00.166
How many days ahead of time or

3096

02:36:00.166 --> 02:36:02.021
hours ahead of time or minutes

3097

02:36:02.021 --> 02:36:04.890
ahead of time are you folks made

3098

02:36:04.890 --> 02:36:08.200
aware that reservoir levels at any

3099

02:36:08.200 --> 02:36:11.125
of these facilities are starting

3100

02:36:11.125 --> 02:36:14.296
to drop and you may need to.

3101

02:36:14.300 --> 02:36:16.778
You may need more water from

3102

02:36:16.780 --> 02:36:19.148
being treated at Camilla.

3103

02:36:19.150 --> 02:36:19.462
Well,

3104

02:36:19.462 --> 02:36:20.710
it just depends on.

3105

02:36:20.710 --> 02:36:22.732
Like I said what the current

3106

02:36:22.732 --> 02:36:23.743
reservoir levels are.

3107

02:36:23.750 --> 02:36:25.712
The judgment that the person who's

3108

02:36:25.712 --> 02:36:27.749
making the decision when they change.

3109

02:36:27.750 --> 02:36:29.982
You know we have a lot of movement in

3110

02:36:29.982 --> 02:36:31.846
personnel and a lot of movement and

3111

02:36:31.846 --> 02:36:33.470
decision makers in this department

3112

02:36:33.470 --> 02:36:36.350
and estimation of rainfall as water

3113

02:36:36.350 --> 02:36:38.270
treatment surface water treatment

3114

02:36:38.346 --> 02:36:40.620
operators were truly at the mercy

3115

02:36:40.620 --> 02:36:42.549
of the weather, so it's hard.

3116

02:36:42.549 --> 02:36:44.127
It's hard to answer your question.

3117

02:36:44.130 --> 02:36:45.330
I'd love to answer it,

3118

02:36:45.330 --> 02:36:48.138
but a lot of times it's it's speculative.

3119

02:36:48.140 --> 02:36:49.980

I understand speculative and that's

3120

02:36:49.980 --> 02:36:51.820
actually what I'm exactly asking.

3121

02:36:51.820 --> 02:36:53.516
Is that speculation is?

3122

02:36:53.516 --> 02:36:56.500
How far in advance generally do you

3123

02:36:56.500 --> 02:36:59.380
know that you might need to pump more?

3124

02:36:59.380 --> 02:37:02.206
Would you know two or three days in advance?

3125

02:37:02.210 --> 02:37:04.100
Looking at reservoir data that

3126

02:37:04.100 --> 02:37:06.430
you might not who you will,

3127

02:37:06.430 --> 02:37:08.230
but you might need to pump.

3128

02:37:08.230 --> 02:37:09.546
You might need to treat more water.

3129

02:37:09.550 --> 02:37:13.020
Come on. I would say when we get to about,

3130

02:37:13.020 --> 02:37:15.888
you know thirty million at Piolo

3131

02:37:15.890 --> 02:37:18.266
we start looking at, you know.

3132

02:37:22.550 --> 02:37:25.964
But but that's like I said, if I leave today,

3133

02:37:25.964 --> 02:37:27.319
and another manager comes in,

3134

02:37:27.320 --> 02:37:28.658
it might pick a different number.

3135

02:37:28.660 --> 02:37:30.786
If a new director comes in, they might

3136

02:37:30.786 --> 02:37:32.590
say you're doing it too soon or too late.

3137

02:37:32.590 --> 02:37:34.481
You know what I mean. So we manage

3138

02:37:34.481 --> 02:37:36.910
the system as efficiently as we can.

3139

02:37:36.910 --> 02:37:39.334
OK, yeah, I'm not asking you whether you

3140

02:37:39.334 --> 02:37:41.239
start pumping more or treating more.

3141

02:37:41.240 --> 02:37:44.300
I'm asking you when you start to think about

3142

02:37:44.300 --> 02:37:46.960
maybe needing to do that in the future.

3143

02:37:46.960 --> 02:37:51.950
And so my question is. Is it possible?

3144

02:37:51.950 --> 02:37:56.567
For the county to give me a heads up.

3145

02:37:56.570 --> 02:37:59.506
To say you know what in a

3146

02:37:59.506 --> 02:38:01.954

couple days we may not well,

3147

02:38:01.960 --> 02:38:04.570

but we may need to be drawn more water,

3148

02:38:04.570 --> 02:38:05.608

because this reservoir.

3149

02:38:05.608 --> 02:38:08.030

Here's level is low or because we're

3150

02:38:08.091 --> 02:38:10.629

feeling because we're in drought conditions.

3151

02:38:10.630 --> 02:38:12.118

Is it possible for you folks

3152

02:38:12.118 --> 02:38:13.690

to give them a heads up?

3153

02:38:13.690 --> 02:38:15.334

No. Why not?

3154

02:38:15.334 --> 02:38:18.074

Because there's too many factors.

3155

02:38:18.080 --> 02:38:19.940

You've got a lot of moving

3156

02:38:19.940 --> 02:38:21.540

equipment that could break down.

3157

02:38:21.540 --> 02:38:23.616

We have no way to anticipate

3158

02:38:23.616 --> 02:38:24.308

equipment failure.

3159

02:38:24.310 --> 02:38:26.430

You've got the weather patterns

3160
02:38:26.430 --> 02:38:27.278
which fluctuate.

3161
02:38:27.280 --> 02:38:27.860
You know,

3162
02:38:27.860 --> 02:38:29.890
we've all seen weather people predict rain,

3163
02:38:29.890 --> 02:38:31.630
and there wasn't any.

3164
02:38:31.630 --> 02:38:33.370
We've seen him predicted

3165
02:38:33.370 --> 02:38:35.069
weather and it rained.

3166
02:38:35.070 --> 02:38:37.326
We've got main breaks at that happen that

3167
02:38:37.326 --> 02:38:39.605
it could cause an unexpected draw in the

3168
02:38:39.605 --> 02:38:42.068
system that we we just can't account for.

3169
02:38:42.070 --> 02:38:44.506
We try to do what you're suggesting.

3170
02:38:44.510 --> 02:38:46.070
We we do it as best we can,

3171
02:38:46.070 --> 02:38:48.770
but there you cannot.

3172
02:38:48.770 --> 02:38:51.776
You not can't get to the point where it's

3173
02:38:51.776 --> 02:38:54.490

time to notify Mahi Pono. It's it's it's.

3174

02:38:54.490 --> 02:38:56.118
There's too much fluctuation.

3175

02:38:56.118 --> 02:38:57.746
There's also maintenance at

3176

02:38:57.746 --> 02:38:59.370
the treatment plant itself.

3177

02:38:59.370 --> 02:39:01.298
At Camogli there's eight

3178

02:39:01.298 --> 02:39:03.226
microfiltration machines inside there.

3179

02:39:03.230 --> 02:39:04.920
My staff need to take.

3180

02:39:04.920 --> 02:39:07.155
Machines out of service while

3181

02:39:07.155 --> 02:39:08.496
running the plant.

3182

02:39:08.500 --> 02:39:10.464
At different intervals based

3183

02:39:10.464 --> 02:39:11.937
on maintenance schedules,

3184

02:39:11.940 --> 02:39:15.279
that again goes back to all the moving parts.

3185

02:39:15.280 --> 02:39:16.762
Every one of these treatment facilities

3186

02:39:16.762 --> 02:39:18.658
has a lot of equipment in them.

3187
02:39:18.660 --> 02:39:21.020
We do a pretty good job of maintaining

3188
02:39:21.020 --> 02:39:22.965
them total equipment breakdown in terms

3189
02:39:22.965 --> 02:39:25.359
of a treatment plan is pretty rare.

3190
02:39:25.360 --> 02:39:27.260
I'm happy to say that,

3191
02:39:27.260 --> 02:39:30.221
but to make the kind of call that you're

3192
02:39:30.221 --> 02:39:32.679
suggesting I think would be very difficult,

3193
02:39:32.680 --> 02:39:34.920
that's all.

3194
02:39:34.920 --> 02:39:35.215
K.

3195
02:39:35.215 --> 02:39:36.985
What's the most water the county

3196
02:39:36.985 --> 02:39:38.640
is used at the kamoli?

3197
02:39:38.640 --> 02:39:40.950
We're in a single day over

3198
02:39:40.950 --> 02:39:42.490
the past two years.

3199
02:39:42.490 --> 02:39:42.809
Well,

3200
02:39:42.809 --> 02:39:44.723

I'm going to say it's around

3201

02:39:44.723 --> 02:39:46.679
four and a half million.

3202

02:39:46.680 --> 02:39:49.130
How about within the last five years?

3203

02:39:49.130 --> 02:39:50.838
Not the same OK.

3204

02:39:55.490 --> 02:40:00.296
Why is conservation of water important?

3205

02:40:00.300 --> 02:40:02.515
Excuse me, why is conservation

3206

02:40:02.515 --> 02:40:03.844
of water important?

3207

02:40:03.850 --> 02:40:05.830
Well, because it needs to be, you know,

3208

02:40:05.830 --> 02:40:08.408
you need to use it efficiently, it's not.

3209

02:40:08.408 --> 02:40:11.732
UM, wasting of water is not

3210

02:40:11.732 --> 02:40:13.349
in anyone's best interest,

3211

02:40:13.349 --> 02:40:16.260
and I think that if we all get

3212

02:40:16.260 --> 02:40:18.213
into that mindset that maybe

3213

02:40:18.213 --> 02:40:20.628
these demand levels can decrease.

3214
02:40:20.630 --> 02:40:23.306
Maybe people are using water responsibly,

3215
02:40:23.310 --> 02:40:25.459
and if they just learn and they

3216
02:40:25.459 --> 02:40:27.721
understand that it's not a finite source

3217
02:40:27.721 --> 02:40:29.635
that they can be more responsible.

3218
02:40:29.640 --> 02:40:32.286
Thank you, I have no further questions.

3219
02:40:32.290 --> 02:40:36.218
OK, uh, are we done with Mr Lindner?

3220
02:40:38.750 --> 02:40:40.785
Uhm, I don't believe it. Yeah,

3221
02:40:40.785 --> 02:40:42.425
I don't believe I have any other questions.

3222
02:40:42.430 --> 02:40:46.310
So unless Mr. Schulmeister does.

3223
02:40:46.310 --> 02:40:48.438
I I don't have any further questions.

3224
02:40:48.440 --> 02:40:50.480
OK, thank you very much Sir.

3225
02:40:50.480 --> 02:40:52.820
We appreciate your time

3226
02:40:52.820 --> 02:40:55.160
and patience with the.

3227
02:40:55.160 --> 02:40:58.488

Hearing today, and you're free to stay and

3228

02:40:58.488 --> 02:41:02.094
turn off your video and audio if you want.

3229

02:41:02.100 --> 02:41:07.819
Or not. It's it's right now 1142.

3230

02:41:07.819 --> 02:41:11.320
I think we can go ahead and break for lunch.

3231

02:41:11.320 --> 02:41:14.322
And when we come back at 1:00 o'clock, Mr.

3232

02:41:14.322 --> 02:41:17.225
Frank will you have. You have a.

3233

02:41:17.225 --> 02:41:19.175
What will have Linscott and then

3234

02:41:19.175 --> 02:41:21.578
we have Lucy and Danae Linscott,

3235

02:41:21.580 --> 02:41:24.040
and then Lucy and Danny, OK?

3236

02:41:24.040 --> 02:41:25.780
Great, thanks everyone.

3237

02:41:25.780 --> 02:41:28.680
We are on lunch break.

3238

02:41:28.680 --> 02:41:31.266
So one till one thank you.

3239

02:41:48.300 --> 02:41:52.845
It's 1:00 o'clock PM on December 13,

3240

02:41:52.845 --> 02:41:55.170
2021, continuing the contested case

3241
02:41:55.170 --> 02:41:58.009
hearing for these Maui water arpis.

3242
02:41:58.010 --> 02:42:00.054
Uhm, I guess I will ask everyone

3243
02:42:00.054 --> 02:42:02.390
to just turn your video on so we

3244
02:42:02.390 --> 02:42:04.500
can get started for the afternoon.

3245
02:42:06.990 --> 02:42:09.246
So we just confirm who's in the room.

3246
02:42:25.060 --> 02:42:27.490
OK, one other coming in here.

3247
02:42:38.800 --> 02:42:41.887
OK, and Meredith Ching are you there?

3248
02:42:56.870 --> 02:42:59.000
He went, why don't we go ahead and you can?

3249
02:43:01.010 --> 02:43:04.860
Uh. Mr. Frankel, are we?

3250
02:43:04.860 --> 02:43:06.096
While we wait for Meredith sing,

3251
02:43:06.100 --> 02:43:08.860
are we doing learn Scott first,

3252
02:43:08.860 --> 02:43:10.039
is that right?

3253
02:43:10.039 --> 02:43:12.340
Yeah, OK so Mr schulmeister.

3254
02:43:12.340 --> 02:43:15.216

I'm not sure Meredith is going

3255

02:43:15.216 --> 02:43:16.988
to be joining so I don't know

3256

02:43:16.988 --> 02:43:17.818
if we're waiting for her.

3257

02:43:17.820 --> 02:43:20.650
This is a good idea so she

3258

02:43:20.650 --> 02:43:23.850
just came into the meeting.

3259

02:43:23.850 --> 02:43:25.030
Back in the waiting room,

3260

02:43:25.030 --> 02:43:27.618
UM, and you can.

3261

02:43:27.620 --> 02:43:29.864
Let her know to just join

3262

02:43:29.864 --> 02:43:31.372
when she's ready up.

3263

02:43:31.372 --> 02:43:34.046
But just to be fair to everyone,

3264

02:43:34.050 --> 02:43:35.303
I just want to make sure we're

3265

02:43:35.303 --> 02:43:36.639
clear on who's here and who's not.

3266

02:43:39.820 --> 02:43:40.930
So alright, I'll go ahead and

3267

02:43:40.930 --> 02:43:42.439
put it back in the waiting room.

3268

02:43:42.440 --> 02:43:45.200
If you guys hear otherwise,

3269

02:43:45.200 --> 02:43:46.466
I can let her back in.

3270

02:43:50.260 --> 02:43:54.285
OK, uhm. Deputy Attorney General Linda Chow,

3271

02:43:54.290 --> 02:43:56.402
could you please swear in our

3272

02:43:56.402 --> 02:43:58.256
witness Lynn Scott and everybody

3273

02:43:58.256 --> 02:44:00.518
else can turn off your video.

3274

02:44:00.520 --> 02:44:02.580
Hi good afternoon Miss Scott,

3275

02:44:02.580 --> 02:44:05.108
do you solemnly swear to tell the truth?

3276

02:44:05.110 --> 02:44:06.870
The whole truth and nothing but the truth?

3277

02:44:10.980 --> 02:44:11.370
Uh.

3278

02:44:14.990 --> 02:44:16.988
Good to hear that I do.

3279

02:44:16.990 --> 02:44:22.810
Thank you. Thanks OK Mr Frankel.

3280

02:44:22.810 --> 02:44:25.732
Mr. Scott, you bum turned in

3281

02:44:25.732 --> 02:44:28.144

a you signed a declaration.

3282

02:44:28.144 --> 02:44:30.690

In this matter, other statements in it

3283

02:44:30.690 --> 02:44:32.900

true and accurate as far as you know.

3284

02:44:32.900 --> 02:44:34.852

Yes, they are OK.

3285

02:44:34.852 --> 02:44:38.706

Uh, we offer Lynn Scott as a

3286

02:44:38.706 --> 02:44:40.950

witness for cross examination.

3287

02:44:44.450 --> 02:44:47.610

Hey Mr Schumer strugis.

3288

02:44:47.610 --> 02:44:51.720

Yes, right this is David Shaw, my Sir.

3289

02:44:51.720 --> 02:44:57.350

34 and B&MI afternoon.

3290

02:44:57.350 --> 02:45:02.188

In Scott good afternoon again, David.

3291

02:45:02.190 --> 02:45:07.435

Uhm? Just looking at your the

3292

02:45:07.435 --> 02:45:09.418

written testimony declaration.

3293

02:45:09.420 --> 02:45:11.590

See in paragraph two, you state that

3294

02:45:11.590 --> 02:45:13.480

you're a member of the CR club.

3295

02:45:13.480 --> 02:45:15.838

Is that right? Yes, I am.

3296

02:45:15.840 --> 02:45:18.088

And how long have you been a member?

3297

02:45:18.090 --> 02:45:20.140

I just joined this year.

3298

02:45:20.140 --> 02:45:22.054

OK, and was that the first

3299

02:45:22.054 --> 02:45:23.330

time you'd ever joined.

3300

02:45:23.330 --> 02:45:25.714

Uh, yeah, I do follow them and I

3301

02:45:25.714 --> 02:45:28.480

keep up on their activities and uhm,

3302

02:45:28.480 --> 02:45:30.718

I have participated in some of

3303

02:45:30.718 --> 02:45:32.650

the lobbies that were done.

3304

02:45:32.650 --> 02:45:34.578

We went to Oahu.

3305

02:45:34.578 --> 02:45:36.986

OK, but it wasn't until just recently

3306

02:45:36.986 --> 02:45:38.600

actually joined this year club,

3307

02:45:38.600 --> 02:45:40.750

yeah?

3308

02:45:40.750 --> 02:45:41.580

Uhm?

3309

02:45:45.490 --> 02:45:48.642

Then you mentioned in paragraph 5 that you

3310

02:45:48.642 --> 02:45:50.988

participated in the proceedings that led

3311

02:45:50.988 --> 02:45:53.608

the Commission on Water Resource Management.

3312

02:45:53.610 --> 02:45:56.628

To set new in streamflow standards.

3313

02:45:56.630 --> 02:45:59.900

For approximately two dozen E smiling

3314

02:45:59.900 --> 02:46:03.592

streams in 2018, do you see that yes,

3315

02:46:03.592 --> 02:46:07.036

and in fact, you testify as a

3316

02:46:07.036 --> 02:46:09.066

witness in those proceedings,

3317

02:46:09.066 --> 02:46:11.456

correct? Yes, I did.

3318

02:46:11.456 --> 02:46:17.510

Now and a lot of your testimony pertains to.

3319

02:46:17.510 --> 02:46:20.387

The use of water from Hornickel stream.

3320

02:46:20.390 --> 02:46:25.120

Trailer for Taro cultivation on lands, the.

3321

02:46:25.120 --> 02:46:28.776

No, you resided upon and your family has.

3322
02:46:28.780 --> 02:46:31.538
Had in the family for several generations.

3323
02:46:31.540 --> 02:46:33.688
Is that right?

3324
02:46:33.688 --> 02:46:36.270
That's correct. And uhm.

3325
02:46:40.710 --> 02:46:42.934
In connection with your,

3326
02:46:42.934 --> 02:46:45.714
your participation in those proceedings.

3327
02:46:45.720 --> 02:46:47.728
I mean, are you a member of NOMOCO?

3328
02:46:47.730 --> 02:46:50.658
The you know the organization that.

3329
02:46:50.660 --> 02:46:54.850
Uh was primarily pushing for.

3330
02:46:54.850 --> 02:46:57.125
The restoration of water in in white,

3331
02:46:57.130 --> 02:46:59.720
Camilo, the white communal area.

3332
02:46:59.720 --> 02:47:01.640
No, I'm not officially a member

3333
02:47:01.640 --> 02:47:04.359
just to make it easier on the books.

3334
02:47:04.360 --> 02:47:06.740
They just combined us both

3335
02:47:06.740 --> 02:47:08.168

together under nomoco.

3336

02:47:08.170 --> 02:47:10.114
I see so and and you are being

3337

02:47:10.114 --> 02:47:11.844
represented by the need of wine

3338

02:47:11.844 --> 02:47:13.532
loot corporation that is correct.

3339

02:47:13.532 --> 02:47:16.080
So naturally you and your extended family

3340

02:47:16.146 --> 02:47:18.904
members who had interests in harmful stream.

3341

02:47:18.910 --> 02:47:21.941
Correct, there were four of us and

3342

02:47:21.941 --> 02:47:25.096
I'm the last surviving member.

3343

02:47:25.100 --> 02:47:28.896
And uhm. So essentially,

3344

02:47:28.896 --> 02:47:31.824
you were advocating for restoration of

3345

02:47:31.824 --> 02:47:35.517
water in horrible stream so that you could.

3346

02:47:35.520 --> 02:47:38.085
Operate the Carol the Cology

3347

02:47:38.085 --> 02:47:41.161
on on the lamp right? Correct?

3348

02:47:41.161 --> 02:47:43.716
And there was a petition.

3349
02:47:43.720 --> 02:47:46.096
Uh, there have been filed by a native

3350
02:47:46.096 --> 02:47:48.599
plant leaves corporation many years earlier,

3351
02:47:48.600 --> 02:47:50.838
specifically to amend the Internet in

3352
02:47:50.838 --> 02:47:53.360
stream flow standard for horrible stream.

3353
02:47:53.360 --> 02:47:55.142
Is that right?

3354
02:47:55.142 --> 02:47:56.330
Yes no.

3355
02:47:59.270 --> 02:48:00.692
At the time you participate in

3356
02:48:00.692 --> 02:48:02.274
that proceeding, did you know

3357
02:48:02.274 --> 02:48:04.850
that whole lava stream was also a

3358
02:48:04.930 --> 02:48:07.490
diverted stream in the licensor?

3359
02:48:07.490 --> 02:48:10.122
Yes we did, but to your knowledge was

3360
02:48:10.122 --> 02:48:12.040
the native plant lead corporation

3361
02:48:12.040 --> 02:48:14.815
ever file a petition to amend the

3362
02:48:14.815 --> 02:48:16.395

interim instream flow standard

3363

02:48:16.395 --> 02:48:18.370
for whole of it straight?

3364

02:48:18.370 --> 02:48:22.570
No, not at that time. Yeah.

3365

02:48:22.570 --> 02:48:24.579
We felt that maybe it might be

3366

02:48:24.579 --> 02:48:26.470
a lot better just to concentrate

3367

02:48:26.470 --> 02:48:29.348
on one at the time and we do have

3368

02:48:29.348 --> 02:48:31.900
taropatch is a long haul of stream,

3369

02:48:31.900 --> 02:48:34.624
but they have since been rendered

3370

02:48:34.624 --> 02:48:37.303
useless because of the lack of

3371

02:48:37.303 --> 02:48:39.637
water and a diversion of water

3372

02:48:39.637 --> 02:48:42.928
away from the natural flow.

3373

02:48:42.930 --> 02:48:45.030
OK, but I mean,

3374

02:48:45.030 --> 02:48:48.666
do you have any recollection in your

3375

02:48:48.666 --> 02:48:51.684
lifetime of water not being differed

3376
02:48:51.684 --> 02:48:54.530
from whole live stream by EMI?

3377
02:48:54.530 --> 02:48:56.380
No, it's always been diverted.

3378
02:48:56.380 --> 02:49:02.820
OK, so when you talk about UM, like a.

3379
02:49:02.820 --> 02:49:06.530
You talk about whole livo in paragraphs.

3380
02:49:06.530 --> 02:49:10.260
8 and 9 and 11.

3381
02:49:10.260 --> 02:49:12.520
Love your declaration in

3382
02:49:12.520 --> 02:49:15.345
paragraph eight you talk about.

3383
02:49:15.350 --> 02:49:16.670
Enjoying whole live stream

3384
02:49:16.670 --> 02:49:18.320
and swim in the stream.

3385
02:49:18.320 --> 02:49:20.924
You visit cultural sites along the stream.

3386
02:49:20.930 --> 02:49:22.904
Enjoy the scenic beauty and tranquility

3387
02:49:22.904 --> 02:49:25.354
of the stretches of stream when and where.

3388
02:49:25.354 --> 02:49:26.346
It is not dry.

3389
02:49:26.350 --> 02:49:28.816

I like hearing and seeing the

3390

02:49:28.816 --> 02:49:30.974
natural flowing stream so these

3391

02:49:30.974 --> 02:49:33.562
are all enjoyments that you've had

3392

02:49:33.562 --> 02:49:36.118
with regard to hold live stream

3393

02:49:36.118 --> 02:49:38.389
during a period in which.

3394

02:49:38.390 --> 02:49:40.995
It's been diverted by Eastmount

3395

02:49:40.995 --> 02:49:43.079
EMI is that right?

3396

02:49:43.080 --> 02:49:43.864
Yes, yes,

3397

02:49:43.864 --> 02:49:46.216
and now I've been visiting these

3398

02:49:46.216 --> 02:49:47.990
streams since the late 60s,

3399

02:49:47.990 --> 02:49:50.930
early 70s, so.

3400

02:49:50.930 --> 02:49:53.020
Between that time and now,

3401

02:49:53.020 --> 02:49:54.488
there's been drastic changes.

3402

02:50:02.690 --> 02:50:04.376
Alright, in paragraph 11 we talk

3403
02:50:04.376 --> 02:50:06.089
about being an owner along with

3404
02:50:06.089 --> 02:50:07.679
relatives of a parcel of land

3405
02:50:07.679 --> 02:50:09.430
that was that parcel of land,

3406
02:50:09.430 --> 02:50:13.077
something that you testified about in the.

3407
02:50:13.080 --> 02:50:15.849
The prior, UM?

3408
02:50:15.850 --> 02:50:17.438
What are Commission proceedings?

3409
02:50:17.438 --> 02:50:19.480
For a whole stream, no.

3410
02:50:24.810 --> 02:50:29.350
No, uhm. Are you a member of

3411
02:50:29.350 --> 02:50:30.919
Maui tomorrow also? No, I'm not.

3412
02:50:34.770 --> 02:50:39.250
And dumb. Can you mention in paragraph

3413
02:50:39.250 --> 02:50:41.800
seven that your participation in the C

3414
02:50:41.800 --> 02:50:44.110
word proceedings does not mean that other

3415
02:50:44.110 --> 02:50:46.180
streams in East Maui or unimportant?

3416
02:50:46.180 --> 02:50:48.241

Nor does it mean that I am 100% happy

3417

02:50:48.241 --> 02:50:50.068

with everything that sea worm has done.

3418

02:50:50.070 --> 02:50:52.590

Did I read that correctly? That is correct.

3419

02:50:56.090 --> 02:50:59.510

Now, uh. Are there?

3420

02:51:02.560 --> 02:51:04.411

Are there streams?

3421

02:51:04.411 --> 02:51:08.113

Any small way that the Water

3422

02:51:08.113 --> 02:51:09.692

Commission provided for

3423

02:51:09.692 --> 02:51:12.097

restoration of that you think?

3424

02:51:12.100 --> 02:51:13.288

It shouldn't have.

3425

02:51:15.460 --> 02:51:18.750

No, I think that each stream these

3426

02:51:18.750 --> 02:51:21.828

are water and that is correct.

3427

02:51:21.830 --> 02:51:23.590

Right, so you're not complaining

3428

02:51:23.590 --> 02:51:26.138

that water that ended up being put in

3429

02:51:26.138 --> 02:51:27.392

some other streams should have been

3430
02:51:27.392 --> 02:51:29.050
put in whole live stream and stuff.

3431
02:51:31.240 --> 02:51:31.630
No.

3432
02:51:33.780 --> 02:51:36.846
I don't quite understand well.

3433
02:51:36.846 --> 02:51:39.125
I mean, you say you're not 100% happy

3434
02:51:39.125 --> 02:51:41.195
with everything to see where his

3435
02:51:41.195 --> 02:51:43.108
dog and I'm one of the things I see

3436
02:51:43.108 --> 02:51:44.867
where I did was to order restoration

3437
02:51:44.867 --> 02:51:46.902
of quite a few streams, correct?

3438
02:51:46.902 --> 02:51:50.375
Correct, including horrible stream, right?

3439
02:51:50.375 --> 02:51:53.300
I assume that you're satisfied

3440
02:51:53.300 --> 02:51:56.486
with their decision to require the

3441
02:51:56.486 --> 02:52:00.710
restoration of clinical strip. Correct?

3442
02:52:00.710 --> 02:52:02.936
Uh, and I'm just wondering if there

3443
02:52:02.936 --> 02:52:04.675

were other streams that restoration

3444

02:52:04.675 --> 02:52:07.585
was provided for, that you thought.

3445

02:52:07.590 --> 02:52:10.680
Uh, shouldn't have been instead a

3446

02:52:10.680 --> 02:52:14.500
whole lot of stream should be the

3447

02:52:14.500 --> 02:52:16.640
recipient of that restoration.

3448

02:52:16.640 --> 02:52:19.881
No, the other streams that we're talking

3449

02:52:19.881 --> 02:52:23.347
about were more in the Wailua Cani area,

3450

02:52:23.350 --> 02:52:25.518
so we're the only ones on this side,

3451

02:52:25.520 --> 02:52:27.920
and no. Yeah no.

3452

02:52:31.020 --> 02:52:32.180
I have no further questions.

3453

02:52:37.310 --> 02:52:40.040
K I can't county of Maui.

3454

02:52:40.040 --> 02:52:42.440
Thank you, I have no questions

3455

02:52:42.440 --> 02:52:44.450
for this witness. Mr Frankel.

3456

02:52:47.040 --> 02:52:50.196
Scotum Mr Schulmeister was trying to

3457
02:52:50.196 --> 02:52:53.709
have you pet stream versus stream,

3458
02:52:53.710 --> 02:52:57.808
but is your real concern having a less

3459
02:52:57.808 --> 02:53:01.091
waste of water less loss of water

3460
02:53:01.091 --> 02:53:05.019
so that more water can be restored

3461
02:53:05.019 --> 02:53:08.560
to stream shut this whole lava?

3462
02:53:08.560 --> 02:53:10.212
I'm going to check I'm going to

3463
02:53:10.212 --> 02:53:11.881
inject to that question as being

3464
02:53:11.881 --> 02:53:13.586
rather obviously a leading question.

3465
02:53:16.290 --> 02:53:18.660
Yeah, Mr. Frankel, could you please

3466
02:53:18.660 --> 02:53:22.430
rephrase your question? So, uhm.

3467
02:53:26.740 --> 02:53:28.540
Are you interested in seeing more

3468
02:53:28.540 --> 02:53:30.600
water flow in whole of the stream?

3469
02:53:30.600 --> 02:53:36.980
Yes I am. And. Is it?

3470
02:53:36.980 --> 02:53:38.360

Would you rather see that

3471

02:53:38.360 --> 02:53:39.740
water come from other streams,

3472

02:53:39.740 --> 02:53:41.665
or would you rather see

3473

02:53:41.665 --> 02:53:44.086
that water come from the.

3474

02:53:44.086 --> 02:53:46.618
Inefficient use of water

3475

02:53:46.618 --> 02:53:49.150
made by my opponent.

3476

02:53:52.340 --> 02:53:55.121
I would like all of a stream to receive

3477

02:53:55.121 --> 02:53:57.919
its own water from the mountain to the

3478

02:53:57.919 --> 02:54:00.440
ocean and not receive water through

3479

02:54:00.440 --> 02:54:03.266
the dishes that come through mahipal.

3480

02:54:03.270 --> 02:54:06.992
K. And by the way. Other times of the

3481

02:54:06.992 --> 02:54:09.243
year when there's more water flowing

3482

02:54:09.243 --> 02:54:11.649
into lava stream than other times.

3483

02:54:11.650 --> 02:54:17.068
Yes. OK, no further questions.

3484
02:54:17.070 --> 02:54:18.766
Here we are. We done with the Scott.

3485
02:54:21.970 --> 02:54:23.660
OK, thank you miss Scott.

3486
02:54:23.660 --> 02:54:24.980
Appreciate your testimony.

3487
02:54:24.980 --> 02:54:26.740
You're welcome to stay.

3488
02:54:26.740 --> 02:54:29.113
You could turn off your video and

3489
02:54:29.113 --> 02:54:31.897
audio or you can leave it up to you.

3490
02:54:31.900 --> 02:54:33.965
Thank you very much and then we

3491
02:54:33.965 --> 02:54:36.129
will move on to Lucy and Danny.

3492
02:54:40.990 --> 02:54:45.535
Hello Linda Chow, would you please

3493
02:54:45.535 --> 02:54:48.174
swear in our witness? Mr Nate,

3494
02:54:48.174 --> 02:54:50.830
do you solemnly swear to tell the truth,

3495
02:54:50.830 --> 02:54:53.270
the whole truth and nothing but the truth?

3496
02:54:53.270 --> 02:54:58.000
I do thank you. Thank you Mr Franklin.

3497
02:55:00.120 --> 02:55:00.810

Uhm?

3498

02:55:06.220 --> 02:55:09.050
The statements in your declaration

3499

02:55:09.050 --> 02:55:11.390
to adapt to this new knowledge.

3500

02:55:11.390 --> 02:55:15.038
Yes they are. We heard testimony

3501

02:55:15.038 --> 02:55:17.600
earlier about why Holy Stream from

3502

02:55:17.600 --> 02:55:19.610
Mark Vaught when were you last,

3503

02:55:19.610 --> 02:55:24.260
that why he stream August 14th of this year,

3504

02:55:24.260 --> 02:55:26.580
but let us see our club hike there.

3505

02:55:26.580 --> 02:55:29.254
And I want to show you this.

3506

02:55:29.260 --> 02:55:33.348
Trial exhibit 64 Homme.

3507

02:55:35.700 --> 02:55:39.180
Uh, do you recognize this?

3508

02:55:39.180 --> 02:55:41.784
Yes, that's the Driscoll pipe that's

3509

02:55:41.784 --> 02:55:44.606
there at Y hue and wasn't there

3510

02:55:44.606 --> 02:55:46.778
on August 14th when you're there.

3511

02:55:46.780 --> 02:55:48.530

Yeah, it was still there.

3512

02:55:48.530 --> 02:55:50.175

And does it serve any useful purpose?

3513

02:55:52.380 --> 02:55:53.340

Not that I could see,

3514

02:55:53.340 --> 02:55:54.915

it was supposed to make a wedded

3515

02:55:54.915 --> 02:55:56.819

path in the streams fully restored,

3516

02:55:56.820 --> 02:56:00.300

so I'm not sure why it would still be there.

3517

02:56:00.300 --> 02:56:01.830

Well, when you say fully restored

3518

02:56:01.830 --> 02:56:03.199

somewhat has been restored to the,

3519

02:56:03.200 --> 02:56:05.690

hasn't fully restored as it.

3520

02:56:05.690 --> 02:56:10.074

While Holy while we yeah why yes fully

3521

02:56:10.074 --> 02:56:12.023

restored in terms of water flow but not

3522

02:56:12.023 --> 02:56:14.022

in terms of diversion structures, right?

3523

02:56:14.022 --> 02:56:16.486

Oh no, the diversion structure is crazy.

3524

02:56:16.490 --> 02:56:19.430

Yeah, it's it's not a natural restoration,

3525

02:56:19.430 --> 02:56:23.126

but there's no water being taken from

3526

02:56:23.126 --> 02:56:26.929

it and there is water going over.

3527

02:56:26.930 --> 02:56:28.730

You know the former damn.

3528

02:56:28.730 --> 02:56:31.136

So this pipe was meant to

3529

02:56:31.136 --> 02:56:33.590

put some water at the dam,

3530

02:56:33.590 --> 02:56:36.774

but there's already water at the dam so.

3531

02:56:36.780 --> 02:56:38.860

The pipe doesn't seem to have any purpose.

3532

02:56:38.860 --> 02:56:41.156

It's embedded in some and it it it.

3533

02:56:41.160 --> 02:56:42.480

You know it kind of changes

3534

02:56:42.480 --> 02:56:43.140

the landscape there.

3535

02:56:43.140 --> 02:56:44.586

It's it's not just a pipe

3536

02:56:44.586 --> 02:56:45.550

laying on the ground.

3537

02:57:00.620 --> 02:57:02.590

I didn't just lose Mr.

3538
02:57:14.350 --> 02:57:18.856
Mr. Franco, I think we can see that you.

3539
02:57:18.860 --> 02:57:20.072
Right here, but we don't see

3540
02:57:20.072 --> 02:57:21.330
you and we can't hear you.

3541
02:57:38.730 --> 02:57:39.762
Sofranko do you wanna

3542
02:57:39.762 --> 02:57:41.310
log out and log back in?

3543
02:58:32.620 --> 02:58:33.940
He's trying to reconnect.

3544
02:58:49.840 --> 02:58:51.688
I just got a text that

3545
02:58:51.688 --> 02:58:52.920
he's having some issues.

3546
02:58:52.920 --> 02:58:55.104
Maybe you should take a recess chair.

3547
03:01:15.250 --> 03:01:19.746
OK, he's gonna come shut down and uh.

3548
03:01:19.750 --> 03:01:23.827
Food back up so it'll be a few minutes.

3549
03:01:23.830 --> 03:01:25.258
We can take a break for five

3550
03:01:25.258 --> 03:01:26.810
minutes and see if he gets back in.

3551
03:04:51.450 --> 03:04:54.222

OK, I think we have Mr

3552

03:04:54.222 --> 03:04:55.768
Frankel back. Up in there.

3553

03:04:59.030 --> 03:05:01.455
I just need everything shut

3554

03:05:01.455 --> 03:05:03.148
down. I gotta, I gotta.

3555

03:05:05.470 --> 03:05:06.100
Take your time.

3556

03:05:26.970 --> 03:05:28.548
Cheap Kitty, yes.

3557

03:05:31.970 --> 03:05:35.002
Yeah, I I literally have no idea what

3558

03:05:35.002 --> 03:05:37.777
we were talking about, who at all.

3559

03:05:37.777 --> 03:05:39.520
I have no idea where we were.

3560

03:05:43.280 --> 03:05:45.134
I don't know if it's my role to remind

3561

03:05:45.134 --> 03:05:46.907
you the last question you asked me.

3562

03:05:50.120 --> 03:05:52.955
Why don't you remind me what I asked you?

3563

03:05:52.960 --> 03:05:54.820
You asked me about the Driscoll,

3564

03:05:54.820 --> 03:05:58.789
a pipeline in the Y Hue stream.

3565

03:05:58.790 --> 03:06:00.681
Whether I had seen it, yeah,

3566

03:06:00.681 --> 03:06:03.218
and whether it was uhm, Oh yeah,

3567

03:06:03.218 --> 03:06:05.416
OK, sorry, and just for the record,

3568

03:06:05.420 --> 03:06:08.090
we're back at 1:24 PM.

3569

03:06:10.160 --> 03:06:13.954
Thank you uhm? But I think we've

3570

03:06:13.954 --> 03:06:15.520
gone beyond that we talked about.

3571

03:06:18.010 --> 03:06:19.474
Case you have now you have

3572

03:06:19.474 --> 03:06:20.870
an idea what I asked.

3573

03:06:26.460 --> 03:06:30.434
Uhm? Mr. Day said you

3574

03:06:30.434 --> 03:06:32.340
were at trial exhibit 64.

3575

03:06:32.340 --> 03:06:35.040
You asked if the pipe was still there is

3576

03:06:35.114 --> 03:06:37.704
today said the flow is fully restored,

3577

03:06:37.710 --> 03:06:41.126
but there are lots of diversion structures.

3578

03:06:41.130 --> 03:06:42.810

Alright, so it's not that OK.

3579

03:06:42.810 --> 03:06:44.469
I I think I asked something else,

3580

03:06:44.470 --> 03:06:46.050
but whatever.

3581

03:06:46.050 --> 03:06:47.658
I will leave it at that.

3582

03:06:54.500 --> 03:06:55.880
Are you done Mr Frankel?

3583

03:06:55.880 --> 03:06:58.060
Yeah yeah yeah, thank you.

3584

03:06:58.060 --> 03:07:01.516
Alright, there's a Kogi thank you,

3585

03:07:01.520 --> 03:07:03.152
good afternoon, Miss Denny.

3586

03:07:03.152 --> 03:07:04.376
I'm Trisha Kogi.

3587

03:07:04.380 --> 03:07:06.600
I represent A and B&MI.

3588

03:07:06.600 --> 03:07:08.904
How are you nice to meet you again?

3589

03:07:08.910 --> 03:07:12.406
Nice to meet you again as well just a couple

3590

03:07:12.406 --> 03:07:14.878
of questions based on your declaration.

3591

03:07:14.880 --> 03:07:16.158
So in paragraph,

3592
03:07:16.158 --> 03:07:19.602
four of your declaration you talk about some

3593
03:07:19.602 --> 03:07:23.022
hikes that the Sierra Club had LED this year.

3594
03:07:23.030 --> 03:07:26.102
Were any of these hiking trips in the

3595
03:07:26.102 --> 03:07:28.827
areas covered by the revocable permits?

3596
03:07:28.830 --> 03:07:30.348
Oh yes, all of them were.

3597
03:07:30.350 --> 03:07:33.851
We get EMI permission to go uh to the

3598
03:07:33.851 --> 03:07:36.666
streams that are in the lease area.

3599
03:07:36.670 --> 03:07:39.217
OK so am I did provide access to the

3600
03:07:39.217 --> 03:07:41.708
Sierra Club for these hikes, correct?

3601
03:07:41.708 --> 03:07:44.740
Yes, we requested permission.

3602
03:07:44.740 --> 03:07:46.615
All of our participants got

3603
03:07:46.615 --> 03:07:48.490
waivers and leaders got waivers,

3604
03:07:48.490 --> 03:07:51.190
as is the usual procedure,

3605
03:07:51.190 --> 03:07:56.709

and that access took place and the Sierra

3606

03:07:56.709 --> 03:07:58.900

Club members were allowed to sign one

3607

03:07:58.969 --> 03:08:01.306

release form for multiple hikes, correct?

3608

03:08:01.306 --> 03:08:04.554

Yes, they've always been able to do that

3609

03:08:04.554 --> 03:08:07.780

in the 25 years that I have led hikes.

3610

03:08:07.780 --> 03:08:10.890

If we do a quarters worth of hikes 3 months,

3611

03:08:10.890 --> 03:08:13.333

one waiver will cover all three hikes

3612

03:08:13.333 --> 03:08:15.200

for the individual participant.

3613

03:08:15.200 --> 03:08:15.578

Yes.

3614

03:08:15.578 --> 03:08:18.224

And the Sierra Club members and were

3615

03:08:18.224 --> 03:08:20.953

also given the option to electronically

3616

03:08:20.953 --> 03:08:24.970

sign the release forms, correct?

3617

03:08:24.970 --> 03:08:26.414

Uh, I believe so.

3618

03:08:26.414 --> 03:08:29.449

I actually brought mine in in person 'cause

3619
03:08:29.449 --> 03:08:32.585
I couldn't figure out how to sign it,

3620
03:08:32.590 --> 03:08:35.510
but uhm, probably some people

3621
03:08:35.510 --> 03:08:36.395
did electronically signed.

3622
03:08:36.395 --> 03:08:39.190
I'm not quite sure how the new system works,

3623
03:08:39.190 --> 03:08:41.770
but uhm, there's some new system.

3624
03:08:41.770 --> 03:08:43.168
Yes, thank you.

3625
03:08:43.168 --> 03:08:45.498
I have no further questions.

3626
03:08:45.500 --> 03:08:46.715
Oh, I'm sorry,

3627
03:08:46.715 --> 03:08:47.930
one more question.

3628
03:08:47.930 --> 03:08:50.905
So in your declaration you also state

3629
03:08:50.905 --> 03:08:53.867
that Sierra Club plans to lead more

3630
03:08:53.867 --> 03:08:56.586
hikes along East Maui streams in 2022

3631
03:08:56.586 --> 03:08:59.340
or any of those hikes going to be in

3632
03:08:59.418 --> 03:09:02.624

the areas covered by the revocable permits.

3633

03:09:02.630 --> 03:09:05.704

Yes, they will all be in areas

3634

03:09:05.704 --> 03:09:08.768

covered by the revocable permits.

3635

03:09:08.768 --> 03:09:11.240

To my knowledge,

3636

03:09:11.240 --> 03:09:13.816

the schedule is just being done this week,

3637

03:09:13.820 --> 03:09:18.098

but. It's likely that there will be.

3638

03:09:18.100 --> 03:09:20.648

Most of them will be revocable permit,

3639

03:09:20.650 --> 03:09:23.359

some will be on private land that

3640

03:09:23.359 --> 03:09:25.400

doesn't involve the lease area.

3641

03:09:25.400 --> 03:09:28.004

Thank you, I have no further questions.

3642

03:09:28.010 --> 03:09:29.141

Thank you Mr.

3643

03:09:29.141 --> 03:09:31.182

Oh County of Maui. Thank you.

3644

03:09:31.182 --> 03:09:33.493

I have no questions for this witness OK,

3645

03:09:33.493 --> 03:09:36.452

Mr Franco. Oh I'm done. Thank you.

3646

03:09:36.452 --> 03:09:38.307
Alright thank you very much.

3647

03:09:38.310 --> 03:09:41.080
Miss Na you are done.

3648

03:09:41.080 --> 03:09:42.934
And so that brings us to

3649

03:09:42.934 --> 03:09:44.890
the end of our witness.

3650

03:09:46.920 --> 03:09:49.629
Group for today.

3651

03:09:49.630 --> 03:09:55.600
Uh, tomorrow so it is a 128 PM.

3652

03:09:55.600 --> 03:09:59.518
Tomorrow, just to confirm we have.

3653

03:09:59.520 --> 03:10:02.460
Kill the Qing Dalton, Bo Perez,

3654

03:10:02.460 --> 03:10:04.240
Dupree, and Wayne Tanaka,

3655

03:10:04.240 --> 03:10:08.210
all called by the Sierra Club in the morning.

3656

03:10:08.210 --> 03:10:10.850
Is that still the case? Mr Frankel?

3657

03:10:10.850 --> 03:10:12.800
I sent an email Friday afternoon

3658

03:10:12.800 --> 03:10:15.079
and maybe some people didn't get it.

3659

03:10:15.080 --> 03:10:17.480

Or so Dalton broke both prayer

3660

03:10:17.480 --> 03:10:20.234
going first thing at 9:00 o'clock

3661

03:10:20.234 --> 03:10:22.378
you subpoena he's appearing.

3662

03:10:22.380 --> 03:10:24.680
I got a call from.

3663

03:10:24.680 --> 03:10:27.183
Dalton and kill his attorney, Kelly,

3664

03:10:27.183 --> 03:10:29.444
is going to be in an airplane.

3665

03:10:29.450 --> 03:10:32.942
He he will not be available to 2:00 PM.

3666

03:10:32.950 --> 03:10:34.816
There is a chance that we

3667

03:10:34.816 --> 03:10:36.800
will not need to call him.

3668

03:10:36.800 --> 03:10:38.846
But I think it's fair to

3669

03:10:38.846 --> 03:10:40.669
say Dalton will pray at 9,

3670

03:10:40.670 --> 03:10:43.354
followed by Wayne Tanaka.

3671

03:10:43.354 --> 03:10:44.696
And then.

3672

03:10:44.700 --> 03:10:46.732
I need 10 minutes 15 minutes to figure

3673

03:10:46.732 --> 03:10:48.512
out where whether we need to call

3674

03:10:48.512 --> 03:10:50.530
Killer Chang or not in the afternoon.

3675

03:10:53.860 --> 03:10:55.659
OK, and then will you all be

3676

03:10:55.659 --> 03:10:57.457
prepared to give your closing

3677

03:10:57.457 --> 03:10:58.900
arguments tomorrow afternoon?

3678

03:11:01.620 --> 03:11:04.530
I I would like to suggest we do it Wednesday

3679

03:11:04.598 --> 03:11:07.078
morning because going through these

3680

03:11:07.078 --> 03:11:09.558
audio recordings is incredibly tedious.

3681

03:11:09.560 --> 03:11:12.710
It takes significantly more time than the

3682

03:11:12.710 --> 03:11:16.080
amount of time on the recording itself.

3683

03:11:16.080 --> 03:11:17.380
So I think it would.

3684

03:11:17.380 --> 03:11:19.144
And then we'd also have the benefit

3685

03:11:19.144 --> 03:11:20.678
of being able to go through.

3686

03:11:20.680 --> 03:11:23.240

Tuesday morning's testimony as well,

3687

03:11:23.240 --> 03:11:24.528
we don't know if we're gonna have

3688

03:11:24.528 --> 03:11:25.699
killed at 2:00 o'clock either,

3689

03:11:25.700 --> 03:11:28.539
so I would like to suggest we have the

3690

03:11:28.539 --> 03:11:31.574
closing arguments from 9:00 to 10:30.

3691

03:11:31.574 --> 03:11:33.645
On Wednesday morning, OK.

3692

03:11:33.645 --> 03:11:35.020
Is that OK with everyone?

3693

03:11:38.170 --> 03:11:43.077
Alright. I'm I'm getting nods so alright

3694

03:11:43.077 --> 03:11:45.533
we'll plan that will plan Mr broke open

3695

03:11:45.533 --> 03:11:47.937
at 9:00 AM followed by Wayne Tanaka.

3696

03:11:47.940 --> 03:11:49.820
Then you can tell us whether you still

3697

03:11:49.820 --> 03:11:51.736
want Mr. Chang at 2:00 PM or not,

3698

03:11:51.740 --> 03:11:53.605
and then we'll do closing

3699

03:11:53.605 --> 03:11:55.775
arguments on Wednesday morning.

3700

03:11:55.775 --> 03:12:01.100

At 9. OK. We're done for the day.

3701

03:12:01.100 --> 03:12:02.908

Alright, thank you everyone.

3702

03:12:02.908 --> 03:12:05.620

It's 1:30 PM on December 13th

3703

03:12:05.620 --> 03:12:07.340

and we'll see you tomorrow.

3704

03:12:07.340 --> 03:12:08.808

Thank you, thank you.