

HEARING STREAM 2 – Day 5**Greater Wellington Regional Council****HEARING STREAM 2****Day 5****Ecosystem Health and Water Quality Policies**

Date: Friday 11th of April 2025

Time: 8.45am

Hearing Stream: Two

Venue: Naumi Wellington

Hearing Panel: Dhilum Nightingale (Chair)
Sharon McGarry (Deputy Chair)
Gillian Wratt
Sarah Stevenson
Puawai Kake

[Hearing Stream 2 – Day 5 – Part 1]

1 Chair: Mōrena everyone. We'll start with a karakia.
2

3 Ruddock: *Kia tau ngā manaakitanga a te mea ngaro*
4 *ki runga ki tēnā, ki tēnā o tātou*
5 *Kia mahea te hua mākihikihi*
6 *kia toi te kupu, toi te mana, toi te aroha, toi te Reo Māori*
7 *kia tūturu, ka whakamaua kia tīna! Tīna!*
8 *Hui e, Tāiki e!*
9

10 Chair: Kia ora everyone. Welcome to Day 5 of Hearing Stream 2 for Proposed Change
11 1 to the Regional Plan for the Wellington Region. We're at the second day of
12 hearing from submitters. We'll start with some very brief introductions.
13

14 Ko Dhilum Nightingale tōku ingoa. I'm a Barrister and I have been practicing
15 law for about 25 years. I am based in Taputeranga, Te Whanganui-a-Tara in
16 Wellington.
17 Our Deputy Chair is joining us today online. I will pass over to Commissioner
18 McGarry.
19

- 20 McGarry: Mōrena. Sharon McGarry. I'm an Independent Commissioner based in Ōtautahi
21 Christchurch.
22
- 23 Kake: Mōrena. Puawai Kake, I'm a Planner, Independent Commissioner from
24 Northland, Te Tai Tokerau.
25
- 26 Wratt: Mōrena, Gillian Watt. Independent Commissioner based in Whakatu, Nelson.
27
- 28 Stevenson: Ngā mihi nui kia koe. I'm Sarah Stevenson, an Independent Planner and
29 Commissioner based here in Te Whanganui-a-Tara, Wellington.
30
- 31 Chair: Thank you. Maybe we'll just let everyone know who the Council team is, who
32 is in the room. We'll start with the reporting officer, thank you.
33
- 34 O'Callahan: Mōrena, my name is Mary O'Callahan. I am an Independent Planning
35 Consultant with GHD and I am the Council's reporting officer.
36
- 37 Rudy: Kia ora, I'm Rudy. I am a Policy Advisor at Greater Wellington.
38
- 39 Ruddock: Tēnā koutou, Josh Ruddock here. I'm Hearing Adviser for Greater Wellington.
40
- 41 Chair: Thank you very much. Unless anyone wants to raise any matters of process, if
42 there is anything Ms O'Callahan would like to discuss?
43
- 44 O'Callahan: Just confirming that I am tabling this morning the updated version with the full
45 number of edits that have been discussed with the Panel through my presentation
46 up until yesterday. There is just the further points that were discussed with
47 Commissioner McGarry. There is an online copy I understand the Panel have
48 got and that's been uploaded on the website, and there's possibly two paper
49 copies here.
50
- 51 Chair: That's very helpful, thanks very much Ms O'Callahan. We do encourage all
52 submitters as well to refer to that version that will be online. That is now the
53 Council's reporting officer's latest version of the provisions that are supporting
54 for the Hearing Stream 2 provisions.
55
- 56 With that, we know that you want have properly seen them Mr Van Berkel, but
57 welcome to Hearing Stream 2. Good to see you again. We know that you've
58 presented before to us. We'll pass over to you to present your submission. Please
59 leave time for questions. Kia ora. Welcome.
60
- 61 **Mr van Berkel**
62
- 63 van Berkel: Kia ora Panel. Ko Pat van Berkel no ahau. I was a community member of the Te
64 Whanganui-a-Tara Whaitua Committee as you know, also on Friends of Art
65 River and I'm very keen to see that the work that we did on the Whaitua
66 Committee comes into effect.
67
- 68 I wonder whether you have the comments that I sent through about three weeks
69 ago. Do you have a copy of that? It called 'Comments on the GW Objectives
70 s42A Report'?
71

- 72 Chair: Yes we do, thank you.
73
- 74 van Berkel: I will just go through that. Feel free to ask questions as I go through.
75 [00.20.05]
76 The first item I want to talk about is paragraph 106 of s42A report which refers
77 to my submission number two and that is about publishing the timeline to 2100.
78
79 The analysis was that there will be ongoing reporting on progress, but that wasn't
80 what I was requesting. What I was requesting is that the whole timeline from
81 now until 2100 be published. Of course it's ridiculous to go into the detail of
82 what exactly will happen in in 2095 or whatever, and I'm not asking that, I'm
83 just asking that there be a detailed timeline for the next five years, and less detail
84 for years after that, through to broad detail all the way up to 2100.
85
86 If we don't have that then we are in the situation that we just are uncertain
87 whether the achievement of 2100 will happen. So I'm very keen to see that and
88 now that I have clarified what the intent of this, I hope that you can see that also.
89
- 90 Chair: Mr van Berkel, are you okay if we take questions throughout? With your slide
91 pack I would just hate to run out of time. Are you comfortable with that?
92
- 93 van Berkel: Yes, very much so.
94
- 95 Chair: Thank you. I just wanted to ask if you had seen the officer's new method M36
96 which I understand was included at least partly in response to the submission
97 point you have made. It's about having a programme to define and implement
98 methods to reach waiora by 2100. If you don't have it there we might be able to
99 put the wording up on the screen.
100
- 101 van Berkel: I don't have it here.
102
- 103 Chair: I appreciate you might not be able to comment on the spot, but just to note that
104 I think the officer has tried to address this submission point you're making
105 through this new method.
106
- 107 van Berkel: When it pops up we can talk about that. I will go onto paragraph 118 which is
108 my point 5 and that's requesting a reference to the Mangaroa peatland.
109 Unfortunately the s42A report doesn't acknowledge the incredible value of
110 peatlands from a carbon benefit, climate change benefit.
111 [00.25.00]
112 When a peatland is healthy it sequesters enormous amounts of carbon and when
113 it is not healthy, and that is the case at Mangaroa, it's been used for farming,
114 when it's not healthy not only it doesn't sequester it but it actually emits carbon.
115
116 I just really would like to see the peatland listed somewhere in the natural
117 resource plan and preferably that there be some acknowledgement of preserving
118 it or restoring it even.
119
120 I happened to listen a talk given on Tuesday this week that six percent of New
121 Zealand's greenhouse gases come from New Zealand peat lands. It is quite a
122 simple matter to make a peat land work well. It's all to do with the depth of
123 water. If it's more than 30cm deep, and when I say more, I mean the level of the

- 124 ground water is more than 30cm away from the surface, then it is slowly being
 125 destroyed. If it is less than 20cm then it is a healthy peat land. So there's a simple
 126 measure.
- 127
- 128 Moving on. Any questions?
- 129
- 130 Chair: Thank you. Mr Ruddock has put up the new method that the Council officer is
 131 proposing. If you can see that there on the screen.
- 132
- 133 van Berkel: No I cannot. No, unfortunately I cannot see it.
- 134
- 135 Chair: That's okay. What we will do is perhaps it's something that you can come back
 136 to. It will be online, available on the Hearing web page. You can have a look at
 137 that, but that is how the officer has attempted to provide for this staging or
 138 progressive updating of actions to move towards waiora.
- 139
- 140 van Berkel: Okay. The key thing is that we actually see a description of what the actions will
 141 be in the future, rather than a summary of what has taken place in the past.
- 142
- 143 Item 3 – paragraphs 131 and 137 refer to my submission six, which is about
 144 primary contact sites. I am happy with not having a separate condition for
 145 primary contact and just incorporating it into primary contact site.
- 146
- 147 Just a matter of interest: there is no mention of the danger to dogs and I just want
 148 to reiterate that something like a dozen dogs have died on Te Awa Kairangi from
 149 consuming toxic algae. I understand the reason – the natural resources plan is all
 150 about humans, okay, that's fine.
- 151
- 152 I want to add one or maybe two primary contact sites but I will deal with that
 153 later.
- 154
- 155 Any questions on that?
- 156
- 157 Chair: No, that's clear thank you.
- 158
- 159 van Berkel: The second point also relating to paragraphs 131 and 137 is just to make maps
 160 searchable. So when you are reading in the text a reference to Map 85, you can
 161 just simply do a find on Map 85 in the pdf and it will find it. It's a very minor
 162 matter and good just to get that tidied up. Maybe it has now been tidied up.
- 163
- 164 Swimmable days: I requested that there be a parameter, a measure of swimmable
 165 days or non-swimmable days and the assessment in the s42A report was there is
 166 no scientific reason for having that, and indeed that is the exact reason why it
 167 should be there. It is not for scientific reasons: it is for the public to be able to
 168 know is the state of the river, from the point of view of swimming and contact,
 169 picnicking and playing, is it improving or not.
- 170 [00.30.10]
- 171 I appeal to you to make that happen.
- 172
- 173 Chair: I don't know if anyone on the Council team who is with us knows the answer to
 174 this, but the LAWA website, which I use to check if it's okay to go swimming

- 175 in Island Bay Harbour, does that give information on rivers and other
 176 waterbodies? Does anyone know? If that gives that indication of swimmability.
 177
- 178 O'Callahan: Have we got Dr Greer on the line? He's probably best placed to answer this.
 179
- 180 Chair: If not, what we could do is we could ask the question in the minute that will
 181 come following the hearing concluding and then we can get the response that
 182 way to you Mr van Berkel.
 183
- 184 van Berkel: Thank you.
 185
- 186 Wratt: Just a question on that. If that information is in LAWA, and I think it is but it
 187 would be good to get that confirmed with Dr Greer, if it is does that respond to
 188 your concern or not? Because that's really just a record on any particular day.
 189 I'm not sure how much it covers any trends. I guess we can look at that as well.
 190
- 191 My question is, would having that in the LAWA website meet your concerns?
 192
- 193 van Berkel: Yes if it records on a comparable basis from year to year at a particular site,
 194 particular primary contact site; either records swimmable days or records non-
 195 swimmable days. It might need to be not amended but taken into account the
 196 days immediately after afresh. They are non-swimmable but it's not because of
 197 toxic algae or E.coli – well, it is E.coli but it's not something that we can do
 198 anything about, it's a natural occurrence.
 199
- 200 If the definition was suitable then yes I would be happy with that.
 201
- 202 O'Callahan: I can confirm that Dr Greer is online but he can't unmute.
 203
- 204 Ruddock: Whilst I'm sorting that out, Mr van Berkel we have put up your Power Point on
 205 our end. If you could just advise which slide you would like us to have presented
 206 and then verbally confirm to jump back and forth when you need.
 207
- 208 van Berkel: Can you move it to Slide 6 please and I will remove mine.
 209
- 210 O'Callahan: I can see Dr Greer there, so I suspect he can answer the question about the
 211 LAWA information.
 212
- 213 Greer: LAWA for Wellington reports every day on whether it's suitable for swimming
 214 based on monitoring data infilled with modelling data. So for every day at the
 215 contact recreation site there is a model estimate of whether the site is suitable
 216 for swimming, which I believe is based on weather and flow, and the calibrator
 217 to measure data.
 218
- 219 I can't confirm this, but I assume that when measure data is collected that it is
 220 directly fed into LAWA, because that would make sense, but I would have to
 221 confirm that.
 222
- 223 O'Callahan: Does it include freshwater?
 224
- 225 Greer: Yes. It includes all freshwater sites.
 226

- 227 van Berkel: The fundamental problem with that is about signs of bacteria – that’s not taken
228 into account?
229
- 230 McGarry: Dr Greer could you maybe explain to Mr van Berkel what you explained to us a
231 couple of days ago in terms of that because it's only measured over the summer
232 that effectively if swimmable days went in there that it would be the same for
233 all the sites. Could you explain that to him please Dr Greer?
234
- 235 Greer: Yes. Mr van Berkel, the national bottom line for our primary contact sites is
236 swimmable.
237
- 238 [00.35.05] The numeric threshold for E.coli is the swimmable threshold above which there
239 is a requirement for signposting. While health risk reduces as you move from
240 the (c) to the (a) state, the number of swimmable days don’t actually change
241 between states because they are all based on the same assessment statistic and
242 they’re all safe for swimming. So basically for 95 percent of the time they are
243 all safe for swimming, just the risk of campylobacter infection is reduced
244 between the (c) to the (a) state, but the number of days swimmable between
245 those states do not change.
246
- 247 van Berkel: I hear that. I think I understand that. However, my point is about the
248 cyanobacteria. There are signs up at the river that say this river has got toxic
249 algae, it is unsafe to swim in, don’t swim; and yet LAWA ignores that.
250
- 251 So, swimmable days is not a measure of swimmable days on the LAWA website.
252
- 253 Greer: There is another website which is where Greater Wellington reports direct and I
254 can provide confirmation or non-confirmation to the Panel and Mr van Berkel
255 on whether that includes cyanobacteria on Tuesday if you like.
256
- 257 van Berkel: Thank you. I go back to my submission which is the additional swimmable days
258 parameter in Table 8.3 – that’s my request. Nothing I have heard today has
259 changed that request. It is something that is understood by the public, and indeed
260 that’s why it's used on LAWA - it's just that it's inaccurate.
261
- 262 Moving onto the next slide please.
263
- 264 Paragraph 281 this is now specifically referring to adding benthic cyanobacteria
265 or cyanobacteria blooms to the table of water quality measures. Just to reiterate
266 the point: if something is measured then we know of its existence and at present
267 there is no reporting of measures of cyanobacteria.
268
- 269 So we have this problem and it is not just in Te Awa Kairangi, it is in many
270 rivers throughout New Zealand – the presence of cyanobacteria. For some
271 reason there is silence on it. It needs to be measured. It needs to be reported.
272
- 273 I gave a little story there at the end of what I wrote which is being at one of the
274 swimming holes and there was a woman with her children. She was standing in
275 the water and she was just mulling over, “Do I let my children go into that water
276 or not?” and finally decided not to. That was a sad thing to witness. That was
277 because of the cyanobacteria. If there’s cyanobacteria there, yep good that she
278 had read the notice, but we need to measure it and we need to report on it.

- 279
280 Next slide.
281
- 282 Chair: Can we just clarify the Council’s position on cyanobacteria. I know it's included
283 in Objective WH.O8 as a primary contact narrative measure. That objective says
284 that there will be a low risk of health effects from exposure to benthic
285 cyanobacteria. But, Mr van Berkel are you saying that parameter should be
286 specifically included in Table 8.3?
287
- 288 Dr Greer I know we have covered this, but do you mind recapping I guess the
289 scientific position on cyanobacteria and how it relates to 8.3?
290
- 291 Greer: First off I can confirm that the LAWA suitability for swimming metric
292 incorporates benthic cyanobacteria as well as E.coli. There are two factors into
293 that. So when the river is unsuitable for swimming due to cyanobacteria and
294 Greater Wellington has sign posted that is reflected on LAWA.
295 [00.40.05]
- 296 The reason why we haven’t set a numeric attribute state for cyanobacteria is that
297 the existing guidance, which goes back to 2009, is still interim. There’s a high
298 degree of uncertainty around the toxic affects at the different levels, and the
299 process for setting NPS-FM attribute states for benthic cyanobacteria has been
300 long and complicated. I understand I haven’t seen it on any of the Panels for
301 that, but an actual number still hasn’t been derived yet because of the difficulty
302 of doing so.
303
- 304 Importantly cyanobacteria isn’t like other periphytons where it simply responds
305 nutrient concentrations and light. It's not well understood. The mechanism by
306 which a specific target attribute state would be achieved are uncertain. It's not
307 something that we can just implement actions to action planning and saying,
308 “Through these actions we’re going to achieve a benthic cyanobacteria attribute
309 state.” We still just don’t know what drives it and at what levels it's toxic.
310
- 311 van Berkel: Well some parts of rivers have benthic cyanobacteria and other parts of the river
312 do not. There is a pattern to it. So that pattern suggest to me that there are causes
313 for it. My understanding is those causes are warmish water, low flows, sediment
314 and nutrients. Those are things that we can do something about – not the warm
315 water but the other contributors to cyanobacteria.
316
- 317 Chair: Sorry Mr van Berkel, just a further question on this. Dr Greer, how will the
318 Regional Council know if objective WH.O8 is met so that there is a low risk of
319 health effects from exposure to benthic cyanobacteria? If the other TAS are met
320 that will be a consequence?
321
- 322 Greer: The Council does monitor cyanobacteria at all contact recreation monitoring
323 sites and does not need a plan driver to do that. As stated in my rebuttal evidence
324 there’s requirements under the Health Act to do that monitoring.
325
- 326 They have the monitoring data to compare against the interim public health
327 thresholds which is how they will define on LAWA whether a site is suitable for
328 swimming or not. They can still use the existing data to assess how it contributes
329 to suitability for swimming at each contact recreation site with the interim
330 guidelines.

331
 332 The reason to not include it in a specific target attribute state in the plan is
 333 generally the actual actions to achieve it are still uncertain and also to allow for
 334 uptake of new targets as they become available into the monitoring framework.
 335
 336 My understanding is that this work is still ongoing and to understanding the
 337 courses and risks from benthic cyanobacteria.
 338
 339 Chair: Thanks very much. Sorry Mr van Berkel we'll let you continue.
 340
 341 van Berkel: Thank you. Moving on and my time is short.
 342
 343 Paragraph 380 is again talking about primary contact sites. There is a major
 344 primary contact site which is the Whakatikei River at the Hutt confluence, the
 345 red dot on the map, and that should be added to the tables.
 346
 347 My understanding is that Council wants to only add primary contact sites that
 348 they do water quality measurements on. My point is that a primary contact site
 349 is a primary contact site, irrespective of whether there is measurement taking
 350 place. So I'm happy that at this particular site there is no measurement because
 351 it may be 500 metres downstream there is a site at Poet's Park that is measured,
 352 but nevertheless this site should be recorded as a primary contact site because
 353 there are other things that can happen to damage a primary contact site, such as
 354 river works. We have bulldozers that go up and down this river reforming it, so
 355 it should be recognised that this a primary contact site and any bulldozing actions
 356 should be done with great care.
 357 [00.45.18]
 358 I would like to see this site added to the list of primary contact sites.
 359
 360 I note that [45.29] Stream was suggested as a site. I think that could be added
 361 also.
 362
 363 Next slide, unless there's any questions on that?
 364
 365 Chair: No thank you.
 366
 367 van Berkel: I didn't previously submit on this, I just wanted to make a point about the
 368 sediment and that has come into the Pāuatahanui Inlet in the Onepoto arm there
 369 is sediment that has come in from natural means and sediment from
 370 development.
 371
 372 I just wanted to make the point that a huge amount of sediment has been
 373 deposited through human action and that will take a long time to work its way
 374 out into the sea, and to allow that to happen we need to reduce the amount of
 375 development caused sediment.
 376
 377 [End of Part 1 recording - 46.38]
 378
 379 [Hearing Stream 2 – Day 5 – Part 2]
 380

- 381 van Berkel: ... time to work its way out into the sea and to allow that to happen we need to
 382 reduce the amount of development caused sediment to a level that is greater
 383 than... I'm going around in circles a little bit.
 384
 385 We need to be reducing sediment by far more than just what is being emitted
 386 from development. I just wanted to add that point.
 387
 388 Next slide.
 389
 390 Paragraph 290 is talking about who is going to carry out the work and it's not
 391 clear to me where the responsibility lies and I feel that there needs to be a really
 392 clear (I don't know whether it's a method or a policy) statement of who has
 393 responsibility. Is it Greater Wellington or it Wellington Water, or is it the TAs?
 394
 395 That will become more apparent if this timeline that I spoke about earlier, which
 396 is perhaps covered in Method M.36 (I haven't seen it) that timeline will explain
 397 not just what the actions are but who will carry out those actions.
 398
 399 Next slide.
 400
 401 This is my summation of what needs to be done on making change. We've now
 402 got the changes happening this year on 'Local Water Done Well' and the ability
 403 to get the loans is going to ease; so I ask get the loans, do the work and get it
 404 done by 2040.
 405
 406 Thank you. I think that's it.
 407
 408 Chair: Thanks very much Mr van Berkel. I have also actually been wondering that point
 409 you make about sediment. We've had evidence from Council experts about the
 410 sediment levels for Te Awarua-o-Porirua factoring in natural sedimentation rate.
 411 I have wondered about whether there was need to reduce below those natural
 412 levels, which is a point that you make. That is something that we will ask
 413 Council to respond to in the minute that we issue. I don't think we've got the
 414 Coastal experts in the room at the moment to address that.
 415
 416 Does anyone have any questions?
 417
 418 Kake: Kia ora Mr van Berkel. Just the last point you made with respect to a description
 419 around the monitoring. There has been some discussion this week around that. I
 420 just want to note and Ms O'Callahan can respond if she likes as well, but under
 421 Objective WH.O9 at clause (e) there is some reference with respect to who might
 422 undertake some of that monitoring with regards to Table 8.4.
 423
 424 I suppose the question is, is that something that perhaps should be provided
 425 under another clause somewhere with respect to one of the other tables you
 426 mentioned, I think Table 8.3?
 427
 428 Van Berkel: I think the monitoring under Table 8.3 and 8.4 are carried out by Greater
 429 Wellington, but mana whenua are getting more involved in this space and I am
 430 very happy with that. Also the citizen groups are also taking an interest. It's
 431 something that ebbs and flows and goes up and down the interest in it from the

432 public. It's probably better that it sits with an authority that has the budget to do
433 it.

434
435 Is that answering your question?

436
437 Kake: Thank you, yes.

438
439 Wratt: Your comment or your last point about who is responsible, I certainly don't
440 disagree with you there, but I think it's different for Method 36, which I haven't
441 actually got in front of me, but there is Method 36A in the rebuttal report which
442 talks about a freshwater action plan; that Wellington Regional Council
443 implement the programme to define and implement methods to reach waiora by
444 2100 within a freshwater action plan or plans for Whaitua Te Whanganui-a-Tara
445 and Te Awarua of Porirua. It talks about developing partnership with mana
446 whenua. Published by 2036. Include methods to progressively deliver, monitor
447 and review progress. Identify responsibilities for implementing specific aspects
448 of the plans.

449 [00.05.35]
450 Does that sound like that addresses your concerns?

451
452 Van Berkel: If it's focussing on the monitoring and progress up-to-date then no, but if it is
453 looking all the way through to 2100 and having for the further away ones a broad
454 description of who is going to do it and what's to be done, then yes I would be
455 happy with that.

456
457 It really is do we have a reasonably clear timeline say covering every five year
458 period, or at worst every ten year period right through to 2100. We know that in
459 the 2070's Te Awa Kairangi will be tidied up and in the 2080's it will be the
460 Kaiwharawhara Stream or whatever. Whether it's done on a catchment basis or
461 whether it's done on the basis of this catchment half of it will be done in this
462 year, and that other catchment half will be done in this decade.

463
464 Wratt: Thank you. My read is that it does, but I guess when we come to it that method
465 is not a consideration in this hearing, but it will come up in a later hearing. You
466 might want to have a look at that and see if that does deliver what you're looking
467 for.

468
469 Chair: Thank you Mr van Berkel, we are overtime so we will have to leave it there
470 unfortunately. We really value having your experience brought from the
471 Whaitua Committee into this plan change process. We hope that you will come
472 back and present in future hearing streams. Thank you very much again for your
473 submissions.

474
475 Van Berkel: It's been a pleasure talking with you. Yes I intend to see this process through.
476 Thank you.

477
478 Chair: Thank you very much.

479
480 **Wairarapa Federated Farmers**

481
482 Wairarapa Federated Farmers, sorry we're a few minutes over. Welcome Mr
483 Matich.

484
 485 Match: I won't take much of your time.
 486
 487 Chair: Welcome. I think you were here before when we did introductions. I think
 488 you've also presented to us before. If you're happy with who we are.
 489
 490 Match: It might have been on the RPS.
 491
 492 Chair: We'll do a quick round just so you know who is here. Also we have
 493 Commissioner McGarry online.
 494
 495 Ko Dhilum Nightingale. I'm chairing both panels.
 496
 497 McGarry: Kia ora. I'm Sharon McGarry. I'm an Independent Commissioner based in
 498 Ōtautahi Christchurch.
 499
 500 Kake: Kia ora. I'm Commissioner Kake, from Te Tai Tokerau, Northland.
 501
 502 Wratt: Mōrena. Gillian Watt. Independent Commissioner based in Whakatu, Nelson. I
 503 was on the RPS panel.
 504
 505 Stevenson: Ngā mihi nui kia koe. I'm Sarah Stevenson, an Independent Planner and
 506 Commissioner based here in Wellington.
 507
 508 Chair: We have read your evidence and do note there are quite a few places where you
 509 do agree with the reporting officer's provisions. These have just been updated
 510 this morning. I appreciate you won't have had a chance to see them, but there
 511 may be some further areas of agreement, but we'll let you present.
 512
 513 Match: I was just refreshing my memory of Ms O'Callahan's recommendation in the
 514 rebuttal this morning. I think there were two points that I'm not quite sure that I
 515 agree with and I'm not quite sure where we are at with the updated version. I'm
 516 sorry, I haven't had time to keep up with that.
 517 [00.10.05]
 518 The pointed about the suggested 20 metres riparian vegetation margin, I'm not
 519 certain that that would be practicable from the point of view of the fact that it
 520 seems a little bit arbitrary. To me nominating that measurement width I note that
 521 the national stock exclusion regulations say 3 metres for a whole range of stock,
 522 from the bed of a river or stream. It does allow for a Regional Council to make
 523 a more stringent rule, but I would think that you would have to assess the costs
 524 and benefits of increasing the distance from 3 metres in the regulation to 20
 525 metres.
 526
 527 The other thing, the question I have is, would the type of vegetation included
 528 pasture; because if it includes pasture, I don't think farmers would have a
 529 problem with vegetation from that point of view. If it's not including pasture in
 530 it's some other kind of vegetation, then what is that? How dense is it? How high
 531 is it? What sort of specimens are they? Does that need to be worked out in terms
 532 of the costs and benefits of increasing the effective riparian margin by putting
 533 planted vegetation in it.
 534

535 Also, I'm not a lawyer but I am not certain about whether any submitters actually
536 requested the 20 metres in terms of scope for putting 20 metres in. Federated
537 Farmers did request that the riparian vegetation requirement be deleted. Whether
538 that is scope for putting in 20 metres or not I'll leave to the lawyers, but that's a
539 question that I have.
540

541 The other point is the 2040 date. Wairarapa Federated Farmers and myself have
542 doubts about whether some of those aims will be achievable by 2040. There is
543 still a lot of water to go under the bridge in terms of how farm plans will be
544 implemented and the mechanism for that in the RMA and changes to the
545 Regulations.
546

547 I realise that's not a point that the hearing panel can take into account at this
548 stage because those things haven't been finalised, and we're dealing with what's
549 currently in legislation, but that gives me cause to ponder about practically
550 whether that timeframe is achievable.
551 Those are the only things that I have to comment on.
552

553 McGarry: I just want to ask the question, the objective that I can see the 20 metres has gone
554 into is WH.05 which only applies to the lakes and not to streams? I'm just
555 wondering if I've got that wrong or if it's somewhere else. I can't see it anywhere
556 else in the provisions.
557

558 Wratt: I was just looking for that as well. That's the only place I can find it. It's (d) of
559 Objective WH.05.
560

561 McGarry: I guess my question is whether that still gives you concern. We did ask Dr Greer
562 some questions about this, and he was of the view that much of the surround of
563 those lakes already was vegetated and that the 20 metres in most cases was
564 already indigenous vegetation, because it only applied to those two lakes.
565
566 Does that change your view sir?
567

568 Match: I accept that. That's obviously the existing situation with those lakes.
569 [00.15.00]
570 Chair: I think it's also Council or Regional Parks. It's Council responsibility for the
571 planting.
572

573 Match: That makes it simple doesn't it.
574

575 Kake: I don't have a question at this stage, but just to acknowledge that there are more
576 discussions coming through future hearing streams with respect to [15.48].
577

578 Match: Indeed. I was to have a member of the Wairarapa Federated Farmers Provincial
579 Executive accompany me this morning but he's come down with a bad case of
580 the cold, so I came anyway.
581

582 Wratt: Perhaps just worth adding as well around that riparian vegetation. There is the
583 addition of a clause along the lines of "other than where physical constraints
584 may prevent this". It's certainly added in WH.05 in relation to the lakes. I think
585 it's been added in some other [overtalk00.16.34] riparian situations as well.
586

- 587 Matich: That would be workable.
588
- 589 Chair: You make the point very well Mr Matich about the importance of having
590 accurate baseline states. I think Ms O’Callahan also agrees and has undertaken
591 to do some work and provide that to us in a table form – I think it's Appendix 3,
592 which brings in updated information on the baseline states where the TAS tables
593 currently say there’s insufficient data. So that will also be available and online.
594
- 595 Matich: That will be helpful. Thank you.
596
- 597 Kake: Just one quick question for my understanding. Wairarapa Federated Famers last
598 time I think in Hearing Stream 1 we heard from Wellington Federated Farmers.
599 Do you know how many federated farmers there are in Wairarapa that are
600 captured by the two Whaitua?
601
- 602 Matich: We do have members in the Wellington and Porirua Whaituas. There are not
603 many members because there’s not many farms left. The concern from
604 Wairarapa Federated Farmers, as I understand, was they were thinking about
605 what might come when it's their turn. That’s why they have submitted the way
606 they have.
607
- 608 In Federated Farmers provincial system, the Wellington and Porirua areas are
609 covered by our Wairarapa province - which I know doesn’t line up neatly with
610 the local government system. It's about a hundred years out of date.
611 [00.20.10]
- 612 Stevenson: No questions from me. The matters you’ve expressed in this hearing in particular
613 are very clear. I would just tautoko Commissioner Kake’s comment that we will
614 see you in future hearing streams. It looks like the next one, rural land use and
615 perhaps freshwater action plans in the hearing stream you’ve covered off in.
616
- 617 Matich: Yes, thanks. I will probably be looking at evidence. I may not be appearing. I’ve
618 got a knee operation on the 30th of April which is knee replacement surgery, so
619 it depends how I go with that as to whether I can get along.
620
- 621 Chair: Mr Matich, I think that was all that we had. All the best. Obviously, there’s the
622 ability to present online as well. Thank you very much.
623
- 624 Matich: Thank you.
625
- 626 **Mr Anker**
627
- 628 Chair: If Mr Anker is available, otherwise happy to [inaudible 00.21.42].
629
- 630 Welcome Mr Anker. We are ready for your presentation if you are ready.
631
- 632 Anker: Thank you very much.
633
- 634 Chair: Catch your breath and take a moment to get your papers.
635
- 636 Anker: I made the mistake of following John’s directions.
637
- 638 Chair: We’ll just take a couple of minutes. Thank you.

639
640 [00.25.00]
641
642 Chair: We'll resume now. Good morning, Mr Anker. Thank you very much for coming
643 along today. We have read your submission and also the speaking notes that you
644 have provided. Thank you very much for that. We will let you present.
645
646 Would you like questions as we have them throughout your presentation or shall
647 we keep them until the end?
648 Anker: Entirely up to you. I'm quite flexible. I managed to get lost in exactly the same
649 way as I did the first time we presented before when I brought Sarah, Phil and a
650 couple of others. History repeats itself.
651
652 Chair: Mr Anker, the technical information for this hearing stream in particular, we
653 have also found quite hard at times to get our heads around; so we do have
654 empathy for that.
655
656 There is a friend of submitter who is available, and I just do encourage you to
657 use that. There's an email address isn't there Mr Ruddock.
658
659 Ruddock: [Inaudible 27.35]
660
661 Chair: Anyway, we empathise. The science here there's a lot of it.
662
663 Anker: I do appreciate that. I wouldn't have even read Mr Blyth's evidence concerning
664 water and the way in which sediment is measured. I wouldn't have even read
665 that if it hadn't have been late coming in and ended up on my email as a
666 standalone item. It did confuse me, the way that it was drafted confused me.
667
668 I think I'm a relatively intelligent person, but I got totally lost. When it comes
669 around to various equations and squares and goodness knows what else I really
670 got lost.
671
672 My original submission focused on whether the structure of monitoring water
673 quality was fit for purpose. It was the opinion of our focus group that a single
674 monitoring station situated at the confluence of the Mangaroa River and the Hutt
675 River was not sufficient.
676
677 A similar question was raised in respect to the Akatarawa Valley where there's
678 again a single monitoring station at the Hutt River, at Birchville. Both of those
679 rivers have catchments that are 20-odd kilometres long, so what happens in the
680 whole of the branch of that river cannot really be summed up with just one
681 monitoring point at the end.
682
683 [00.30.00] I understand Mary O'Callahan's response to me in that she considered that one
684 monitoring point was sufficient, but the thing that crossed my mind sufficient
685 for what?
686
687 If the data that's collected is just intended to say whether water is of a particular
688 quality at that singular point then it will be sufficient. But, if that is then used to
689 suggest that something has happened within the catchment, it becomes
690 insufficient because it cannot possibly identify the source of that change and

691 that's the concern that our group has got, in that the whole of the catchment
692 becomes tarred with the same brush.

693
694 We believe that there is a strong probability that evidence that comes forward,
695 data that comes forward through that catchment point will be used as a
696 justification as to why properties four hectares and over need to be registered as
697 farms. That would require those properties engage a series of measurements and
698 monitoring as far as the quality of the water is at their boundaries. There are a
699 lot of properties across the Mangaroa Catchment area that fall into that scope
700 and I think that will be covered a lot more in Hearing Stream 3.

701
702 It was clear to us that the singular point can indicate that a change has taken
703 place, but it can't identify where within the catchment that change occurred. The
704 onus is then placed on the landowners to prove a negative. "It wasn't me. I didn't
705 do it."

706
707 We're also concerned that in respect of nutrients the landowners are being
708 required to solve a problem that doesn't exist.

709
710 When we originally looked at the information that came out prior to Christmas
711 2024, it was clear from that information that GW provided that nutrient levels
712 in the Wellington region were about as low it's possible to get. There was also
713 evidence put forward by them that a singular area in gorse would produce as
714 much nitrogen as a dairy farm.

715
716 My colleague behind me, John, on his farm uses no fertiliser. He uses no
717 fertiliser because economically it doesn't make any sense. It would cost him
718 more to put on the fertiliser than he would get back from the produce of the farm.
719 Therefore, he uses no fertiliser.

720
721 I think you will find over a period of time that the same things applies to every
722 landholder in the Managaroa Valley.

723
724 A lot of the land in the Mangaroa Valley is now owned by the Monaghan's and
725 they are strong believers in regenerative farming. They are organic. They don't
726 put on fertiliser and they don't put on sprays. They rely on traditional farming
727 methods to keep the fertility of their soil up.

728
729 The thing that concerned us was that Mary's response about the monitoring
730 points indicated that there was a different use for the data that was being
731 collected. Our question then is, once the data has been collected then what? What
732 is the next step? What is the next logical progression that we go to after the data
733 has been collected? We know the data can do lots of things, but it can't identify
734 where within the catchment any problems originated.

735 [00.35.00]

736
737 We're also concerned that the majority of the land in the Mangaroa Valley and
738 indeed in Upper Hutt as a whole is either owned by the Wellington Regional
739 Council or DoC. The amount that's in private ownership is relatively quite small.
740 We feel that the onus is being placed on the private landowner to do something,
741 but that same onus is not placed on Greater Wellington or DoC.

742 I have said to you in my notes that the number of feral animals in the valley is
 743 just totally out of control. My granddaughter went out the other evening as she
 744 wanted to check on her pony. She walked out and in the paddock where her pony
 745 was there was one stag and six hinds. They don't belong to us but they do eat
 746 our grass and they do foul our waterways and they're not controlled at all. They
 747 come from Greater Wellington land. They come from DoC land.

748
 749 We understand that some rules are always necessary for the common good. We
 750 understand that, but we are of the firm opinion that those rules should be equally
 751 applied to everybody in the catchment and not just private landowners.

752
 753 When we come to the next hearing stream, we'll end up having to deal with a
 754 raft of situations where rules have been put in place in a rather haphazard
 755 fashion, because they seemed like a good idea at the time. We will be taking
 756 issue with that when it comes to Hearing Stream 3.

757
 758 Thank you.

759
 760 Chair: Kia ora. Thank you very much. Mr Anker, I'm so sorry, we didn't do
 761 introductions, and I apologise for that. Perhaps before we ask a question, we'll
 762 also just introduce ourselves. I'm sorry I got ahead.
 763 Commissioner Nightingale and I'm chairing both hearing panels. Thank you
 764 very much again for your very clear presentation.

765
 766 I appreciate the modelling evidence from Mr Blyth is very complicated. Dr
 767 Greer and Ms O'Callahan have in their evidence and their rebuttal they have
 768 taken the conclusions from the modelling and they have then I think presented
 769 it, in what I find, in an easier to understand way.

770
 771 I don't know if you have read Ms O'Callahan's and Dr Greer's rebuttal evidence
 772 but they do I think respond to this point about the one monitoring point,
 773 hopefully in a way that is easier to understand. We'll see from your presentation
 774 if there are further points that they wish to address in their right of replies.

775
 776 I just appreciate the modelling is very complicated.

777
 778 I will see if anyone else has any questions.

779
 780 Anker: Just one correction to Bob. I would love to use fertiliser. It's just the cost at the
 781 moment is extreme and all costs that come would be my question... just
 782 correcting his.

783
 784 Chair: We're at the outcome stage with this hearing stream and then of course the
 785 implications and how that applies will be Hearing Stream 3 and Hearing Stream
 786 4. I think because we are still fully getting our heads around those provisions,
 787 it's not that we don't have questions. I think we need to wait until that point to
 788 engage with you fully on those issues.

789 [00.40.05]
 790 Also, predator control, I don't know yet, but there may be something that comes
 791 out of the freshwater action planning requirements and obligations on Council
 792 regarding that, but we'll need to just wait and see when we get to that point.

793

- 794 Anker: Thank you.
795
- 796 Stevenson: Thank you, Mr Anker. I appreciate you taking the time to come in this morning.
797 Your points have been very clearly made.
798
- 799 It's my understanding that Council's reporting of this will be updating those
800 target attribute state tables, to lovely large number tables. They will be on
801 Council's website, or in fact are now and may have been updated over the last
802 few days as more data and information became available and then other changes
803 have been made to the objectives.
804
- 805 Anker: Thank you. I'm sure you'll appreciate that for a lay person to try and actually
806 plough through the volumes of information that's coming out, just to simply read
807 it takes a lot of time. If you're a professional and it's your job then you can focus
808 time at it. If you're like me and you've got other demands that have been placed
809 on your time with family and looking after your own property, you reach the
810 point where you just simply run out of time. I would love to be able to go through
811 and read thoroughly everything that's been put in front of us, but quite honestly,
812 I just can't do it. It's not physical possible for a lay person to be able to go
813 through and do that, so I have to cherry-pick. As a result of that I am the first
814 one to admit that I have probably missed things, and I miss things that important.
815 That's why we rely on this sort of forum to highlight those areas that really, we
816 should have paid a bit more attention to.
817
- 818 Thank you.
819
- 820 Chair: Maybe then it might also be useful to note that since the notified version of the
821 provisions, the Council's technical evidence now recognises that for Mangaroa
822 there is naturally occurring brown water that's coming I think from that
823 catchment and so the sediment that is factored into a reduction in the sediment
824 TAS.
825
- 826 That's just a change that I thought I would note in case you hadn't picked that
827 up from the technical evidence, that they acknowledge the levels of the notified
828 version didn't account of the naturally occurring brown water that's present.
829
- 830 Anker: The waterway that runs through John's property is called Black Creek for a very
831 good reason. It's basically rainwater that has drained through peat soil and has
832 picked up the tannings from the peat soil. Black Creek is a most appropriate
833 name for it.
834
- 835 Chair: I can't actually put my finger on the maps that show the monitoring sites. Does
836 anyone know the number of that? I just want to see where your community is in
837 relation to the monitoring site. It's not Map 79.
838 [00.45.00]
- 839 Ms O'Callahan do you recall the Map reference number for the monitoring sites?
840
- 841 O'Callahan: I am just finding it. Its Map 79 and 78.
842
- 843 Chair: Thanks very much. So, the yellow dot target attribute states sites, those are the
844 monitoring points.
845

- 846 Mr Anker, I don't know if you've seen this map, but it's Maps 78 and 79. I'm
847 happy to actually come and pass a copy to you, but I just wanted to see and make
848 sure I understand where your community is in relation to this. It's the yellow
849 dots are the monitoring sites.
- 850
- 851 Anker: As Les has just pointed out, there are Black Creeks everywhere. There's a Black
852 Creek in Wainuomata which is a fair distance away from us and not within our
853 watershed.
- 854
- 855 The Te Marua monitoring point would be somewhere around 5km [47.32]
856 location.
- 857
- 858 Wratt: My understanding was that your community that you're representing are all
859 upstream of that Mangaroa.
- 860
- 861 Anker: Correct. Absolutely right. The Mangaroa River runs for 20-odd kms to its source
862 and the vast majority of properties are at least 4 or 5kms away from that
863 monitoring point.
- 864
- 865 There's a lot of new development taking place at Te Marua. There is I think
866 about 110 new houses going in at the end there, but they're all within less than
867 one to two kms from the monitoring point.
- 868
- 869 The area of peat that generates the discolouration the water would be at least 5
870 to 6kms upstream from that point. There are a lot of tributaries coming down to
871 the mainstream of the Mangaroa River.
- 872
- 873 Wratt: From what I have been hearing the last few days and reading, and I certainly
874 appreciate your comment about the difficulty of getting your head around all the
875 information that's there, it's immense, and it's a challenge in terms of having to
876 have science base for setting these targets.
- 877
- 878 What I'm hearing from the Council is that the sites that on that map are the state
879 of environment reporting sites. Your concern is what then or how then is that
880 information that comes to that monitoring site used – which to me, and I'm not
881 trying to avoid the question, but it really comes to the methods and what the
882 Council does to then follow up, which really is (and you probably wouldn't have
883 heard because you were on your way here) but there's a method that's been
884 added to the plan change around freshwater planning, identifying
885 responsibilities.
- 886 [00.50.05]
- 887 So, I encourage you and again I appreciate the time it takes. I encourage you to
888 look at the more detail that comes into other methods and rules in the document,
889 to see what happens next in a way.
- 890
- 891 Anker: That really is a concern to community, in that the question "What then?" has not
892 been discussed with the community. That becomes very important.
- 893
- 894 My understanding, and I'm sure you'll correct me if I've got it wrong, that the
895 object of the exercise is to get buy-in from the community, because without buy-
896 in from the community officers in the Regional Council can achieve nothing.

897 You rely on the community to be part of the solution, as opposed to being part
898 of the problem.

899
900 Wratt: Absolutely.

901
902 Chair: We are at time. It's been very helpfully pointed out that where the residents live
903 is the Upper Hutt rural communities, is actually sort of south of the Mangaroa
904 Te Marua monitoring point.

905
906 Anker: Yes, correct. The river is a result of geological movements actually does a
907 reverse flow; it flows from the south to the north and then back south again down
908 to Silverstream Bridge. It forms a sort of U-shape. That's as a result of
909 earthquakes uplifting the valley and changing the direction of flow over tens of
910 thousands of years.

911 [Attendee]: The problem with the community was the compliance costs of everything. That
912 monitoring station you had grades. It was clear we were hoping it would stop
913 any compliance costs for the rest of the valley. We all want clean water. If there's
914 monitoring ideas through the valley if that monitoring station was absolutely
915 tickety-boo, which it appears to be, we don't want to have to be doing things
916 that are non-sensible further up the valley. That's the simplistic view of it.

917
918 Chair: I would be interested actually in the Council's response on this, but I feel like
919 it's probably something that we need to ask for in their reply, rather than I think
920 maybe 'on the hoof'. We don't have the scientists in the room here at the
921 moment. And, because as Commissioner Kake says, it is also very relevant for
922 Hearing Stream 3.

923
924 We understand the point that you're making and I have some questions. Is it the
925 Te Marua monitoring point? Is it one that's further down the stream of the
926 catchment? That might pick up the land use activities that are going on in your
927 community. I think will get some more information from the scientists and that
928 will come through in their reply, which will follow this hearing.

929
930 Thanks very much again for coming along today. Thank you.

931
932 **Upper Hutt City Council**

933
934 We have Upper Hutt City Council presenting. Are they available online?

935
936 Chair: Kia ora Ms Nes. Welcome. We'll do some quick introductions.

937 [00.55.00]

938 Ko Dhilum Nightingale tōku ingoa. I am a Barrister chairing the freshwater
939 panel and the Part 1 Schedule 1 Panel. I will pass over to our Deputy Chair.

940
941 McGarry: Mōrena. My name is Sharon McGarry. I'm an Independent Commissioner based
942 in Ōtautahi Christchurch.

943
944 Kake: Mōrena. I'm Puawai Kake, a Planner and Independent Commissioner based out
945 of Northland, Te Tai Tokerau.

946
947 Wratt: Mōrena. Gillian Wratt. Independent Commissioner based in Whakatu Nelson.

948

- 949 Stevenson: Ngā mihi nui kia koe. Ko Sarah Stevenson tōku ingoa. I am an Independent
950 Planner and Commissioner based in here in Wellington.
- 951
- 952 Nes: Kia ora Commissioners and Madam Chair. Ko Nes [Māori 55.57] ko Gabriella
953 tōku ingoa. I think I will just jump right in. I will just need to reconfirm my
954 stance in relation to the Code of Conduct. I'm sure you've all read my evidence.
955 I'm really happy to take that as read.
- 956
- 957 I have read the rebuttal evidence of Ms O'Callahan, Dr Greer and Mr Walker
958 and I have been listening into the proceedings over the last couple of days, or all
959 week I suppose. I don't propose to go into my evidence in any detail. I have
960 some comments to make in response to the rebuttal evidence. I will do so just
961 by going through the provision and note whose evidence I'm responding to as I
962 go. Hopefully I don't jump around too much. If that's okay with you all.
- 963
- 964 Chair: Yes, that sounds good thank you.
- 965
- 966 Nes: Just beginning with Ms O'Callahan's evidence, her responses to my statement
967 of evidence are in Table 10 of her rebuttal which starts on page-30. In relation
968 to row one about our general submission points that Upper Hutt did in terms of
969 the primary submission, a little concern that the general points are not being
970 considered at every hearing stream and it would be great for those to be given
971 consideration to the panel just overall.
- 972
- 973 I don't have anything further to say, but just from an ongoing point of view on
974 that.
- 975
- 976 In row three Ms O'Callahan states that there are no relevant policies or rules in
977 relation to WH.06, which I believe is a ground water objective. Just to give
978 clarity to the panel, the groundwater policies and rules I was kind of considering
979 which may be affected by that change to 06 for WH.P7, WH.P33, WH Rule 33
980 and 34, and WH Rule 36.
- 981
- 982 As I said in my evidence, we're really happy to leave that to further hearing
983 streams, just noting that those ones are the aspects which I was considering
984 which would have flow-on effects through from the changes to that objective.
- 985
- 986 Then jumping to the big ones, Table 8.3 and 8.4 and WH.08 and 09. I think it's
987 really important to begin by setting the context for the Territorial Authorities in
988 relation to the plan change, and particularly Upper Hutt. As I'm sure everyone
989 is aware the cost of living crisis is huge and it's hitting councils very hard. Our
990 ratepayers are bearing the brunt of that and to put it bluntly they're really hurting
991 in regards to everything that's happening at the moment.
- 992
- 993 One of the Council's main reasons for submitting is that as an infrastructure
994 provider the step change that was being regulated is really significant and has
995 really significant requirements on costs, on resources, on implications for rates,
996 which speaks to kind of the achievability of those outcomes.
- 997
- 998 On top of that we have a number of wastewater and stormwater consents, which
999 I'm sure Wellington Water will discuss this further, but will need re-consenting
1000 and viable consenting pathways within that time period of the plan.

1001
1002 Just in regards to what Upper Hutt is doing around water, we've spent upwards
1003 of 40 percent of our rates in the last year on Three Waters activities and we are
1004 really committed to improving our infrastructure and our waterways. As a
1005 council we have to consider that affordability and achievability aspect. We're
1006 really in between a rock and a hard place on this, and I appreciate that actually
1007 as a panel you all are perhaps even more so.

[01.00.05]

1008
1009 I part supported the Whaitua process and as a council we believe in the
1010 improvement of our waterways, of being able to swim, fish and enjoy our awa
1011 and Te Awa Kairangi in Upper Hutt is really a gorgeous place that makes up a
1012 huge part of our district. But the target attribute states as notified, and Dr Greer
1013 noted this in his primary statement of evidence, required a 76 percent rates
1014 increase sustained over 16 years to 2040, which was the highest of all the
1015 territorial authorities. Figure 9 of Mr Walker's primary evidence (and I'm sorry
1016 I don't have it right in front of me) it indicates that because of our demographic
1017 and the makeup of the city we also don't have the workforce to absorb that level
1018 of rates increase.

1019
1020 I do support the extension of the timeframes to 2060 which is recommended by
1021 Ms O'Callahan in her rebuttal evidence. I believe it's in response to Mr
1022 O'Donnell's Table 8, row 2.

1023
1024 I believe these changes will go a long way to making these more achievable and
1025 that isn't to say that the achievements can't be made earlier. The intention for us
1026 is not to kick the can down the road, but to give us time to not only innovate and
1027 to find better ways to fix our water, but to figure out the funding streams that we
1028 can leverage and stand up the workforce that we really need to get there.

1029
1030 One thing I'm not totally clear on, and this may just be because of the really
1031 large amount of technical evidence that we've been reading over the last few
1032 days, is that landing at the next implementation timeframes in regards to some
1033 being 2040, some being 2050 and some being 2060, and that may be a point of
1034 clarity that the experts can provide. I believe Dr Greer in Table 2 of his rebuttal
1035 evidence, which is the difficulties to achieve table, notes that the E.coli targets
1036 for both rural streams and the urban streams of Te Awa Kairangi will be quite
1037 difficult to achieve within the scope of PC1, but only the urban streams have
1038 been extended for the timeframes in Table 8.4 as a result.

1039
1040 Then I was also listening into the discussion a couple of days ago around the
1041 Pakuratahi River and the way it flowed. I'm sorry I'm not entirely sure where
1042 that landed in regards to the E.coli target given it's a rural area and the potential
1043 destocking that might be required in regards to it. I may leave that to however
1044 you decide to respond, the panel, right of reply or anything.

1045
1046 Moving on, I note that Ms O'Callahan's responses to my issues around
1047 consenting in Table 10, row 6, but I do remain concerned that the approach of
1048 WH.09 in relation to infrastructure consents may lead to unanticipated
1049 complexities where they are not able to demonstrate achieving the objectives. I
1050 know this is something that you've been discussing throughout the week, and I
1051 understand that it's a state of the environment outcome, but I think I'm finding
1052 hard because it doesn't totally track with my experience with writing and

1053 processing regional consents for an application that doesn't meet a rule has a
 1054 relationship back to and needs to be tested against those wider objectives. And,
 1055 it may be that as Mr McDonnell suggested yesterday, this is something that could
 1056 be solved by making these strategic objectives and separating out the aspects of
 1057 the provisions which tended to be relevant to a consent application, or not.

1058
 1059 I support the deletion of the dissolved copper and zinc at non-urban sites
 1060 recommended in Table 7, row one of Ms O'Callahan's rebuttal. I think this is
 1061 really practical given Greater Wellington has noted they have no intention to
 1062 monitor those sites. I think that's really practical.

1063
 1064 Just a note that I agree with the evidence of Ms Hunter from Wellington Water
 1065 and the rebuttal evidence around where baseline information is not available and
 1066 the kind of appropriateness of setting targets in those areas.

1067
 1068 I don't believe I have anything else. I really wanted to just focus on remaining
 1069 areas of concern or contention, or particular spots.

1070 [01.05.05]

1071 Really happy to hand over to the panel for any questions that you may have.

1072
 1073 Chair: Thank you very much. Ms Nes, have you seen Mr Walker's rebuttal evidence
 1074 where he specifically addresses what he estimates would be the Upper Hutt City
 1075 Council rates increase to achieve the TAS on the modified timeframes?

1076
 1077 He has read all the evidence presented by the TAs and Wellington Water and
 1078 has projected a step-change in rates of 13.5 percent out to 2040 and then
 1079 dropping to 12.5 percent from then out to 2060. There's quite a few things that
 1080 doesn't include, but in terms of the infrastructure work required that is his
 1081 projection.

1082
 1083 Have you had a change to look at that? That is less than I think what Upper Hutt
 1084 City Council's submission had originally estimated.

1085
 1086 Nes: Yes. That's in regards to the lowered TAS's and the extended timeframe, I think,
 1087 based on my understanding. Yes, it's that 13.5 percent. Yes, I have seen that and
 1088 I do support. I think it sits in support of that 2060 timeframe and really shows
 1089 the difference in between what was as notified and what we have got into so far.

1090
 1091 Chair: Thank you. So given that economic evidence, and I appreciate that it's not a
 1092 complete cost analysis, would you support the mixed timeframe approach that's
 1093 proposed now, or are you still advocating for 2060 across the board with the
 1094 TAS and coastal objectives?

1095
 1096 Nes: We can't really speak to coasts considering we don't have one, so I will let my
 1097 other colleagues say in regards to that. I don't want to put anything in their
 1098 mouths.

1099
 1100 I think from our perspective the mixed timeframe does go pretty far into making
 1101 that quite a lot better. As I mentioned, I'm not entirely clear on how we've
 1102 landed on the mixed implementation and that may be that with a little bit more
 1103 clarity in regards to the science as well as the economics that we can support that

- 1104 mixed. With that I'm just not totally clear why some have been moved and some
1105 haven't.
1106
- 1107 One thing I was thinking is maybe it was in regards to some are more achievable
1108 than others, but as I said I'm not totally clear.
1109
- 1110 Chair: That will be coming through from Dr Greer and Ms O'Callahan, which I am
1111 hoping will summarise everything; so a final position on timeframes and better
1112 baseline information and also TAS.
1113
- 1114 Nes: Yes, I heard that one of the things the Panel asked for was that what has been
1115 achieved already and what needs to be achieved and how that connects back to
1116 the timeframes. I think where that lands in the right of reply will be really helpful
1117 for helping us all to understand exactly where we are sitting and what still needs
1118 to be prioritised.
1119
- 1120 Kake: Ms Nes, you've said you've been listening in over the last few days. I just want
1121 to get some clarity as to whether or not you were listening in yesterday with
1122 respect to the mana whenua submissions.
1123
- 1124 Nes: Yes I was.
1125
- 1126 Kake: Can you confirm Upper Hutt City Council has been involved through the
1127 Waitua process since the beginning?
1128
- 1129 Nes: Before my time, but I do know that Upper Hutt was involved in the Waitua
1130 process.
1131 [01.10.00]
- 1132 I can't speak to whether it was exactly from the beginning, but I do know that
1133 was something we were involved in yes.
1134
- 1135 Kake: Picking up on what you have just presented to us with respect to the level of
1136 investment that the Council has provided to infrastructure services, your Council
1137 is an infrastructure provider. I'm just trying to get an understanding I suppose in
1138 terms of these particular discharge points that are along the river that has been
1139 described and defined to us by mana whenua as a significant body of wai and
1140 that for generations the Council has under-invested in this infrastructure.
1141
- 1142 Can I get some clarification I suppose with respect to the long-term investment,
1143 and we've had some economic analysis around that, that there have been
1144 generations from mana whenua who have had to endure the impact of that under-
1145 investment. Can you respond to that, so we can clarify the Council's position on
1146 that?
1147
- 1148 Nes: We do have quite a significant investment identified in our long-term plan,
1149 which is from I believe 2040 onwards. Look, one thing that I have been
1150 discussing around this with my infrastructure colleagues, and the number that
1151 they have let me know is 40 percent of the rates that we collected in the last year
1152 have gone directly to Three Waters activities. That isn't to say that Council is
1153 not making a significant investment towards this infrastructure. That will only
1154 go up as we go along, as we figure out what the Three Waters I suppose form

1155 looks like. I believe the intention is for that to still continue to be a Council
1156 controlled organisation, whether or not the structure changes.

1157
1158 Upper Hutt will be in the room making sure that we are providing significant
1159 investment towards these things. I'm sorry I can't speak to the future. I know
1160 there is significant investment in our longterm plan, but from just what we have
1161 been doing in the last year I've been told it's upwards of 40 percent of all the
1162 rates we have collected.

1163
1164 Kake: Just on that quickly if I may, the submission point around Te Awa Kairangi
1165 urban streams and amending the target attribute state from a (c) to a (d) and
1166 extending the timeframe to 2060, have you got a response to that? Do you think
1167 that meets the aspirations and the goals of the Council towards meeting their
1168 obligations with mana whenua?

1169
1170 Nes: I think we definitely support the extension of the timeframe to 2060. To date the
1171 Council has been a little agnostic, for lack of a better word. We haven't
1172 formulated a specific position on the reduction of those TAS targets. We want
1173 to be really aspirational if we can. We want to do that within the parameters of
1174 what we feel ratepayers in our community can afford.

1175
1176 Regardless, this is going to cost more money on top of what they have already
1177 seen. I'm conscious that the evidence we've been provided so far doesn't
1178 necessarily look at those things in connection to each other. We've had the
1179 longer timeframes or the reduced targets. The reduced targets for 2040 or the
1180 reduced targets for 2060 but not the notified targets for 2060. I believe that was
1181 only touched on very briefly in Dr Walker's original primary evidence.

1182
1183 If we can say that it's something that we might be able to absorb and it won't be
1184 as low as the six percent of the reduced targets, but perhaps a step-change higher
1185 than that for a longer period of time is something that we can do if we want to
1186 be really aspirational.

1187 [01.15.05]
1188 I don't think Upper Hutt would necessarily push back if the Panel was of a mind
1189 to keep the notified targets, considering that is what was agreed to with the
1190 Whaitua. Our argument is that 2040 just is not something that we're practically
1191 able to achieve, even with reduced targets.

1192
1193 Wratt: Thank you Ms Nes. You've mentioned this 40 percent of your rates funding
1194 going into a water initiative. Do you have a feel for how that much that will help
1195 deliver on what's in PC1? That's a clear question for you.

1196
1197 Nes: This may be slightly outside of my areas of expertise. I am not in our operations
1198 team, and honestly it may be something that Wellington Water can speak to a
1199 little bit more in regards to that. I know a significant portion of that goes towards
1200 the wastewater treatment plant upgrade at Seaview, so that is money that is not
1201 being pushed towards PC1 targets in particular. I know it will help along but it's
1202 not those dry weather leak aspects that are being identified.

1203
1204 The level of investment there I believe Mr Walker kind of talked about it in his
1205 primary evidence, that there's \$1.47B across the four TAs, but a significant
1206 portion of that is going to go to that wastewater treatment plant.

1207
 1208 Sorry, I'm still not totally clear on what that proportional looks like.
 1209
 1210 McGarry: I'm just wondering, that 40 percent, I don't have any context for that, but I would
 1211 imagine most councils around the country are spending a similar proportion on
 1212 Three Waters – I would hope they are anyway, being a core function.
 1213
 1214 Is it possible Ms Nes for you to provide us with some information as to how
 1215 much money has been spent in the last couple of financial years on trying to
 1216 resolve dry water leaks and trying to resolve dry water leaks and trying to target
 1217 some of those issues of contamination, which I would call faults in the system?
 1218
 1219 Nes: Yes I can provide that. I would have to do some investigating but I can provide
 1220 that to the Panel in written form.
 1221
 1222 McGarry: That would be really useful, thank you.
 1223
 1224 Just one other question from me and it really relates to paragraph 39 of your
 1225 evidence – you talked there about Greater Wellington working collaboratively
 1226 with the TAs to achieve the outcomes by adding additional funding. I just wanted
 1227 to know whether you acknowledge the fact that probably the biggest skill or the
 1228 biggest contribution that GW can offer to this process is an information one, and
 1229 in supporting the TAs with the science and the data to be able to prioritise and
 1230 locate these hotspots of contamination so that moving forward they can actually
 1231 try and address what I call the low-hanging fruit and getting the biggest bang for
 1232 your buck. Would you recognise that that's probably the biggest contribution
 1233 that GW can make?
 1234
 1235 Nes: Yeah. I think the information that Greater Wellington can provide us is massive.
 1236 Them as well as us, we're in significant financial holes, for lack of a better word.
 1237 I think we do all just need to work together.
 1238
 1239 I think my point that I was trying to make in that paragraph was those are really
 1240 long-term aspects that we need time to really collaborate and get those things
 1241 into place. With the way that I guess local government works and the
 1242 bureaucracy works, all working together with Greater Wellington to both find
 1243 new funding streams to work in that space, using their information, using their
 1244 expertise, would still require a significant amount of time and practically I just
 1245 don't think 2040 is necessarily long enough for those things to be investigated
 1246 for the information to be used to create that, and stand up and then fund them,
 1247 and then also see the reduction in water quality that we need to see by 2040.
 1248 [01.20.20]
 1249 There is lag time that needs to be pushed into that monitoring and all of those
 1250 things.
 1251
 1252 Yes, I think we can recognise that Greater Wellington has a significant role in
 1253 that.
 1254
 1255 McGarry: Thank you.
 1256

- 1257 Chair: Ms Nes, thank you. I think the information that Commissioner McGarry has
 1258 requested is going to be very helpful for us, and it's probably something that
 1259 we'll ask all the TAs to provide.
 1260 I am interested in the relationship Upper Hutt has with Wellington Water. As I
 1261 understand it, within your rohe Upper Hutt owns the assets, but Wellington
 1262 Water carries out the work that's required on them.
 1263
 1264 In terms of direction and identifying priority areas, where the data is showing
 1265 there is degraded water, do you know if Upper Hutt City Council directs
 1266 Wellington Water to be targeting those areas that are most in need? In terms of
 1267 the available funding you're saying, "Go to those areas first," or do you rely
 1268 more on Wellington Water to be providing you that information?
 1269
 1270 Nes: Sorry, I don't know the answer to that statement. I think Wellington Water might
 1271 be a little bit... I'm not in the operations or infrastructure team so I'm not
 1272 entirely clear on how those relationships function. Perhaps Wellington Water
 1273 can give a little bit more information in regards to that.
 1274
 1275 Chair: Thank you. Perhaps when you are talking to the operations team and coming
 1276 back to us [01.22.50 – nil audio] interested in that, to the extent you can provide
 1277 that.
 1278
 1279 Nes: Yes, I'm sure that we can provide that as part of the written reply.
 1280
 1281 Chair: Thanks very much.
 1282
 1283 Stevenson: Thanks Ms Nes. We haven't really touched on Upper Hutt City Council's
 1284 concerns about data or data uncertainty. You referenced compressed timeframes
 1285 and incomplete modelling. I'm interested in your response to Greater Wellington
 1286 Regional Council's legal counsel who noted that delays due to data uncertainty
 1287 would be inconsistent with the National Policy Statement on freshwater
 1288 management and that Councils acting on the best available information.
 1289
 1290 What's your view on that and the need to proceed?
 1291
 1292 Nes: I understand the need to proceed. I note that when we would be looking into
 1293 acting under the plan that we would need to be looking at that current state data
 1294 anyway, rather than necessarily the baseline.
 1295
 1296 So, while we appreciate that the data is not necessarily there, but that it needs to
 1297 continue, it also is quite hard for us to form a stance or an opinion without all of
 1298 the available information.
 1299 [01.25.00]
 1300 I think it's just there as a note from us and I believe the other Territorial
 1301 Authorities will probably be in agreement here is, we can't know whether things
 1302 are achievable if we aren't given the information that says it is and many of us
 1303 don't have in-house economics or freshwater scientists to be able to review these
 1304 pieces, like very large technical pieces of information to say, "Yes, we have that
 1305 kind of ability to reduce the load reduction to achieve these targets by that
 1306 much."
 1307

- 1308 I think very similar to a lay person we're not in a position to state an opinion
 1309 unless we know exactly what we are looking at and we have someone to tell us
 1310 those things are achievable. I appreciate Dr Greer and Dr Walker's evidence
 1311 goes a way into being able to provide that, but I suppose it's just the nature of
 1312 preparing all these things at pace, that some of those things just aren't available.
 1313
- 1314 Chair: Just one final one from me Ms Nes. You mentioned the Upper Hutt City's
 1315 discharge consent or consents, are these global district wide?
 1316
- 1317 Nes: Yes.
 1318
- 1319 Chair: Is there one for stormwater? Are you able to just give a bit of context and also if
 1320 you know when they're up for renewal?
 1321
- 1322 Nes: Yes. That might be something I can provide a little bit more in that written reply
 1323 if that's okay. I know that our global stormwater and wastewaters are coming up
 1324 for renewal. I believe an application may or may not have been made by
 1325 Wellington Water on behalf of the Territorial Authorities in regards to those.
 1326 They may be able to give you a little bit more detail when you speak to them
 1327 later on today, but I can also provide that as part of the written reply if that's
 1328 helpful.
 1329
- 1330 Chair: Thank you. Yes, they have actually talked about that. We're best to get that
 1331 information from them. So Upper Hutt City's discharges are captured in that
 1332 region-wide.
 1333
- 1334 Nes: Yes.
 1335
- 1336 Chair: I think that was all we had. Thank you very much for your time and evidence.
 1337 We look forward to receiving the further information in time when you can
 1338 provide it. We will make a note of it in the minute that's coming, so don't feel
 1339 you've got to provide that in the next week or so. We'll put a reasonable
 1340 timeframe in there. I appreciate there's a bit to put together.
 1341
- 1342 Thanks very much.
 1343
- 1344 Nes: Thank you. Thank you. Ngā mihi nui.
 1345
- 1346 Chair: Kia ora. We'll take a break now and we'll be back in just over twenty minutes,
 1347 so at 11.10am with the New Zealand Farm Forestry Association. Thanks very
 1348 much.
 1349
- 1350 **[Adjourned – morning break 01.28.23]**
 1351
- 1352 **[Hearing resumes – 01.51.43]**
 1353
- 1354 **New Zealand Farm Forestry Association**
 1355
- 1356 Chair: Good morning. We'll resume again. Welcome is it Mr Cairns. I think you have
 1357 been here this morning when the other submitters presented. Would you like us
 1358 to quickly run through who we are?
 1359

- 1360 Cairns: [Nil audible 01.52.02]
1361
- 1362 Chair: Thank you for your submission and also your evidence statement. I think we
1363 have some further notes, is that right?
1364
- 1365 Cairns: Yes. I'm not exactly sure how acceptable it will be but the rebuttal evidence of
1366 Mr Blyth sort of challenged my quoting of Dr Murray Hicks. I thought I would
1367 provide a copy of his actual email to me, just to show that we had actually had
1368 that conversation. You may not choose to accept that, but I will come to that
1369 perhaps more on the point.
1370
- 1371 Also, I have written some additional speaker notes if you like to my Slide 6, in
1372 relation to clarifying the slide there, partly in regard to the rebuttal evidence of
1373 Dr Greer and Mr Blyth. I thought I would put those up as additional documents
1374 if that's alright.
1375
- 1376 Chair: Yes, that's fine Mr Cairns. We'll pass over to you. We do have questions, so
1377 leave time for those at the end. Thank you.
1378
- 1379 Cairns: Thank you very much. Could I have my first slide from my slideshow please?
1380
- 1381 Allow me to point to a particular point in the slide. Thank you. Just a wee
1382 comment there that the photograph there is a confluence of the Mangaroa River
1383 and the Hutt River at [01.54.39] and you can see the dark water coming out on
1384 the right there is the Mangaroa River and the clear water from the Hutt
1385 Catchment in behind.
1386
- 1387 [00.55.00] My first point to reiterate and this is already picking bits out of my written
1388 statement there, I came across a note from MFE Guidance just emphasising that
1389 freshwater objectives should not ride the NES National Environmental Standard
1390 plantation forestry – I'm not sure of the exact date of that note. That of course
1391 has become the NES commercial forestry which does specifically allow for
1392 councils to make more stringent provisions than that outlined in the NES CF;
1393 but with the proviso that they'll need sufficient stringency to do so. This will be
1394 a part of our argument in the next hearing stream.
1395
- 1396 I want to just follow up, as I think other speaker have about what is the natural
1397 state. The photo there is by the way at the outlet of Black Creek where it drains
1398 the Mangaroa peatlands. That was taken in January this year. I will perhaps come
1399 back to that.
1400
- 1401 We have about 28 years of clarity of data that exists for Mangaroa River at the
1402 official monitoring point at Te Marua. While I haven't statistically analysed it
1403 you can just visualise it. There are no real significant trends over time. I will
1404 come back to this again, the monitoring point at Te Marua, but there appears to
1405 be no publically available for clarity or sediment in the tributaries or upstream,
1406 which is a point I want to come back to.
1407
- 1408 I make the point that while there is policy statements have an expectation for the
1409 natural state of sediment to revert to pre-human levels, I think that's there in the
1410 freshwater management policy statements and that's actually unrealistic.
1411

1412 So what we have is the national bottom line seems to becoming the default
1413 natural state.

1414
1415 Just a little more on this. The Black Creek is a small tributary of the Mangaroa
1416 River. You can see the colour there, the tea-coloured tannins. I want to point out
1417 that the opalescence and murkiness of that stream in January 2025 shows the
1418 quite high levels of suspended sediment, which you can see the water is not clear
1419 there and reflects the light.

1420
1421 I am suggesting that that is a natural event from the peat swamp. I think Dr Greer
1422 and others challenge – that’s an aside, but while the peat lands have been highly
1423 modified there are very few grazing animals in there.

1424
1425 My notes there do refer to a long-term history of land use in Mangaroa Valley
1426 with many of the hills in the immediate area having been cleared in the 1950s
1427 and ‘60s onto pastoral farming incentives, with the ability to fly in fertiliser. A
1428 lot of that land has since reverted to scrub or been converted to plantation
1429 forestry.

1430
1431 So, the proportion of the entire catchment is substantially in pasture; so
1432 substantially less than it was forty to sixty years ago.

1433
1434 We now have a lot of lifestyle blocks in the area and a more intensive
1435 infrastructure which still occupies a very small percentage of the overall
1436 catchment which I don’t have a slide for that, but the catchment will have been
1437 defined elsewhere.

1438
1439 The last eight or ten years there was no dairy farming exists in the Mangaroa
1440 catchment anymore. I’m saying that as a result of that there will be much less
1441 intensive winter grazing which might have been thought of as a major
1442 contributor to sediment.

1443
1444 The median visual clarity target attribute state for Managaroa, we’re very
1445 pleased that the Greater Wellington scientists and consultants have
1446 acknowledged the natural brown water source that prompts resetting the target
1447 attribute state.

1448
1449 This will be in the following slide – we know that the median historic collected
1450 data over 28 years still only meets the revised target for five months each year
1451 and that will be in the next couple of slides we’ll show graphs of that.

1452 [02.00.05]

1453 The revised median visual clarity of 1.67 metres rather than 2.2 is based on a
1454 limited dataset and only deals with subtracting the effects from the CON – that’s
1455 the coloured dark organic matter.

1456
1457 Of course, there are all sorts of natural sources and other sources of suspended
1458 sediment but that contribution there, that resetting revised level perhaps does not
1459 acknowledge that a significant source of peat debris might be coming out of the
1460 peat lands.

1461
1462 Based on the very limited dataset being used by Dr Valois on the nine data points
1463 and I’m not even sure over what time period, we’re actually asking that revised

1464 target attribute state be treated as an interim value. I think Dr Valois has pushed
1465 back on that. I had a conversation with Dr Murray Hicks last night – Dr Murray
1466 Hicks being a retired NIWA scientist that has contributed a lot to the policy
1467 documents and procedures that are adopted and advised nationwide.

1468
1469 Dr Hicks believes that a target attribute state should be based on five years of
1470 data or 60 points, not nine points. It also tells me that I haven't been able to see
1471 the relevant publication that there is scope to use a seasonally adjusted attribute
1472 state.

1473
1474 There's about a two-fold between winter and summer months – a little further
1475 on there's variation in the visual clarity at Te Marua. Some of that may be
1476 explicable by the means, but the relative proportion of the CDOM from
1477 Mangaroa peat lands is not constant throughout the year – and maybe scope to
1478 reassess what the target attribute state actually is.

1479
1480 This slide we have on the screen there, just in passing, that is taken from just
1481 below the confluence of Mangaroa River and Black Stream. I have deliberately
1482 put in some logs there where there's been bank collapse as the stream under
1483 flood conditions has undermined a small pine plantation. Obviously that bank
1484 collapse contributes as a natural source of sediment.

1485
1486 I am concerned about measurement uncertainty for calculated reductions and
1487 sediment yields for the reason that if a large reduction is required and is a
1488 consequence of that land use changes, which seems to be the way the guidance
1489 documents have come through, required in terms of the proposed removal of ten
1490 percent of the plantation of forestry and ten or more percent of pastoral land. I
1491 think there's a need for some accuracy in those projected figures that justifies
1492 that stance.

1493
1494 This is why I am honing in on measurement uncertainty here because there's
1495 several slides here.

1496
1497 Ms O'Callahan I think and Mr Blyth have acknowledged that the suspended
1498 sediment based on dSedNet are unreliable. They change a lot from one year to
1499 the next and there's calculations, and they probably get in the way and are a bit
1500 of a distraction.

1501
1502 The revised target attribute states for Mangaroa River visual clarity, the
1503 calculations for reduction sediment have dropped from over 50 percent to
1504 between 17 to 22 percent. That's still a very substantial reduction required.

[02.05.10]

1505
1506 I want to refer to the calculations used here. There is some agreement already
1507 from Mr Blyth and Dr Hicks that the relationship between target total suspended
1508 solids and visual clarity at relevant levels that is close to the target attribute state
1509 are unreliable.

1510
1511 Our submission is that for Mangaroa River total suspended solids is an
1512 unreliable indicator of visual clarity and therefore calculated percentage
1513 reductions on total sediment load are invalid. I will come back to that shortly in
1514 the next slide.

1515

1516 What I have on this slide here, it's presented slightly different than in my earlier
 1517 submission because I have changed the axis there to match the way the data is
 1518 presented by Mr Blyth in earlier documents, with an adjusted clarity going on a
 1519 downward scale.

1520
 1521 This is effectively the data that Dr Valois has used to calculate amended target
 1522 attribute state, but when you look at her data points there and there are only
 1523 seven of them there, in the region of the relevant visual clarity, around about the
 1524 2 metres of clarity, there is a very poor relationship, or I will say there is no
 1525 relationship between total suspended solids and visual clarity; but yet you need
 1526 improvements in sedimentation that will bring the visual clarity to the target
 1527 attribute state. This is my point. This is the critical value that Mr Blyth is
 1528 attempting to dismiss, which Dr Hicks and I say is critical. You cannot rely on
 1529 a calculated reduction and total sediment yield to give you the clarity you're
 1530 improving, because this is the critical point and there is no good relationship
 1531 between the two parameters there.

1532
 1533 Rule of thumb with R^2 , you've got about four or five percent of the variants
 1534 between the two variables is explained on that graph. It's effectively not there.

1535
 1536 My speaker notes have a few other explanations there but I think I'll be running
 1537 out of time if I go into all of those, except perhaps to point out that clarity and
 1538 turbidity and so on are affected by particle **size** [02.08.47] on the water and that's
 1539 not easily dealt with on the sort of plots that the consultants have put up there.
 1540 The type of sediment that's there in high flood levels and medium flood levels,
 1541 and near base flows are different particle **size** and therefore affects the visual
 1542 clarity and that sort of relationship.

1543
 1544 I think as a consequence of this you need to look at other ways of dealing. Rather
 1545 than justifying land use changes you need to look at the sorts of factors that
 1546 affect the clarity at low flow levels – which I will come back down to.

1547
 1548 My speaker notes have a lot more stuff there.

1549
 1550 Part of this is that the limit of quantification for the total suspended solids
 1551 method is 3mgs per litre. So, all that data point there is really below the limit of
 1552 quantification for the method. Those data points are less accurate you might say.

[02.10.10]

1553
 1554 I don't quite know how we got down to .3mg per there, that must have been a
 1555 point right at the limit of detection. The accuracy of the total suspended solids
 1556 on that graph is suspect but is critical to calculating a reduction in suspended
 1557 solids required. We're saying that's inaccurate and this 17 or 20 percent
 1558 reduction that is calculated by Mr Blyth and others could be wildly inaccurate.

1559
 1560 My comment on the speaker notes: instead more work is required to investigate
 1561 sources of natural sediment along with seasonal variations and that there is an
 1562 appropriate water plan implemented. I understand there's a new method just
 1563 been issued that may address that.

1564
 1565 And, that research should be done before implementing significant land use
 1566 changes.

1567

1568 We did take the data that's available on the Greater Wellington website for
1569 visual clarity going over, I forget how many years there, 28 years and calculated
1570 the median values by a month. You can see the blue plot on the left there, that
1571 the clarity is much better in March on average and worse than August. It pretty
1572 much mirrors if you like changes in median water flow.

1573
1574 I had suggested that perhaps flow rates out of Mangaroa peat lands, or relative
1575 flow rates rather, might impart or describe what's going on there. There appears
1576 to be other papers and I'll concede to Dr Greer that other papers that show a
1577 similar variation and clarity according to median water flow.

1578
1579 I'm sticking my neck out a little bit here in suggesting that there was a
1580 misalignment of policy advice. I think in the case of Mangaroa River, as Dr
1581 Hicks has pointed out, a proviso of councils being required to calculate total
1582 sediment yields and try and correlate that to visual clarity, the provisos were that
1583 there was a good correlation at the median clarity value. In the case of Mangaroa
1584 River that is definitely not the case, which sort of invalidates the process and
1585 calculations and makes the estimates very inaccurate.

1586
1587 My additional notes that have been provided for you are speaking notes for this
1588 slide.

1589
1590 The rebuttal evidence given by Dr Greer and Mr Blyth appears to me downplay
1591 the relevant importance of local sources of sediment. There focus is very much
1592 on total annual sediment loads, as in that predicted by dSedNet models for an
1593 entire catchment.

1594
1595 Slips and similar erosion events during flood flows clearly make up the vast
1596 majority of total annual sediment load, but somehow a portion of the suspended
1597 sediment, and no-one quite knows how much in our case, becomes captured in
1598 the stream beds and periodically moves forward and forms sludge. This implies
1599 that leakage from that source of total sediment is the driver for visual clarity at
1600 low flow levels; and I'm imagining that is why they have therefore disregarded
1601 the poor prediction value between total suspended solids and visual clarity,
1602 which we saw in the previous slide.

1603
1604 One might then conclude that relatively frequent events such as livestock access
1605 to waterways, vehicle traffic on gravel roads and brief discharge of water with
1606 suspended sediment above the discharge limit are therefore unimportant, as
1607 collectively these form such a tiny part of the total annual sediment load, which
1608 was 11,000 tonnes a year I think – 200 tonnes a month out of the Mangaroa
1609 River of suspended sediment, not total sediment.

1610 [02.15.30]

1611 Clearly my last narrative there does not align with Council policy. What we are
1612 saying for Mangaroa River is that because the relationship of visual clarity and
1613 total suspended solids is so poor and supported by Dr Murray Hicks that
1614 something else must be significantly contributing to visual clarity at low river
1615 flows.

1616
1617 If because of this plan change you choose to restrict land use by preventing
1618 forestry harvesting or pastoral grazing on steep land, in combination with the

1619 very wide annual variations and sediment yields, you may not achieve target
1620 visual clarity; and there is a high risk of mitigation effects being ineffective.

1621
1622 This is a slide you needed when the other speaker at Mangaroa was present.
1623 That's really the Mangaroa River. That slide there, right at the top Te Marua is
1624 where the monitoring point is. I have done some water sampling from the other
1625 red dots along the river there myself.

1626
1627 A point Dr Greer rebuts against us there, what we are trying to say is while the
1628 point at Te Marua averages everything upstream, it doesn't actually tell you
1629 what's happening up stream in terms of the differences – as my next table will
1630 show you.

1631
1632 The Mangaroa peat lands are just in this area, and that's Katherine Mansfield
1633 Drive. The peat lands are all in this area. There's a major urban subdivision
1634 happening just in here, [02.17.47] farms. There's been recent extensive
1635 harvesting in the Collett's Stream area, this one here, and in this area here.

1636
1637 What I am doing is it's based on a standard method but adapted for the equipment
1638 that I had there.

1639
1640 The photo on the right there happens to be a culvert where the new subdivision
1641 is running through. I'm not claiming the discharges limits exceeded the limit but
1642 there's some pretty murky water coming out of there for a long time – both
1643 branches of that stream.

1644
1645 This is the one I want to spend a bit more time on. The rows in brown there are
1646 affected by peat drainage, and the other ones are different catchments there.
1647 Different times during the month it's all relatively low flow levels. Sampled
1648 within a few hours of each other coming down there. We've got a day where
1649 1.45 metres according to my not expert, but self-taught on this method, that
1650 would have failed the target attribute state. Other parts in the catchment though
1651 are well above, other streams there meeting suitable water clarity statements.
1652 You're not actually seeing that when you're all you're doing is monitoring it at
1653 Te Marua – the same as further down there.

[02.19.45]

1654
1655 There's bracketed data there using a [02.19.50] which is just about a metre long
1656 with a black duster you can slide backwards and forwards and it's more suitable
1657 for more murkier water than what we have got here.

1658
1659 Some of these streams you need to use the periscope and the black box. You
1660 need large pools of still water, so it's not easily possible to monitor greater than
1661 3 metres there because the pools aren't long enough in the side stream to see that
1662 sort of difference.

1663
1664 What I'm really trying to show you is a lot of variation up and down the
1665 catchment that you don't see if all you're doing is monitoring at Te Marua. This
1666 one here is the urban subdivision and it's quite low clarity there. Collett's Stream
1667 was lower than I would have liked to have seen. We don't know how long it's
1668 actually going to take to recover.

1669

1670 This is following clear-fell harvest. This did improve the following month there
1671 but they were just finishing the actual logging out there. That's dreadful water
1672 clarity.

1673
1674 I'm acknowledging, contrary to Dr Greer and others trying to point out to me,
1675 forestry harvesting can cause some issues, particularly in the shorter term if the
1676 [02.21.22] minimal. I want to come back to that if I may.

1677
1678 As commented by the previous speaker, what are the consequences of not
1679 achieving a target attribute state? I think the rules are not spelled out. Potentially
1680 I think it's already proposed that perhaps forestry harvesting might be suspended
1681 if target attribute state is not met.

1682
1683 Even if sub-catchments comply with the water quality this will penalise innocent
1684 parties, but there may be little proof if any of alleged misdemeanours or poor
1685 practice.

1686
1687 We're saying that should target attribute states not be met there needs to be a
1688 proper investigation identifying the nature and sources of suspended sediment
1689 in sub-catchments and that there should be a focus on land use practices that
1690 could affect the median visual clarity, rather than necessarily total annual
1691 sediment yield. And there needs to be documented history going from way back
1692 of changes in land use practice; and how would you unbundle climate change
1693 effects from human induced [02.22.52] that are uncommon for stream veg to
1694 scour out under heavy rainstorms.

1695
1696 I will try and move on here.

1697
1698 This is another area where Dr Greer has criticised me for not having suitable
1699 methodology and controlled studies and so on. I don't see that's my job. I'm a
1700 scientist but in chemistry is not to provide the raw data but to challenge what's
1701 put in front of us.

1702
1703 Ten years water clarity data for Horokiri Stream from July 2015 to 2025. Over
1704 that ten-year period (which also covers the period of Transmission Gully
1705 motorway construction) forestry harvest has been only a very small amount of
1706 harvesting going on here. The last three years there's a lot of harvesting going
1707 on here. Motorway construction right through here. Not all of these very low
1708 visual clarity points here correspond to higher rainfall events, so something has
1709 clearly happened in there. I know that there were potential prosecutions of the
1710 highway contractor for alleged breaches of stuff during that period that may or
1711 may not have gone through.

1712
1713 What I'm saying is that all that ten years of data there the median value still
1714 exceeds the target attribute state and I think that's 2.6m and the target attribute
1715 state given as a Grade C, for some reason, was 2.3 metres.

1716 [02.25.10]

1717 My next slide will show a bit more graphically. If you can see, this is looking
1718 across Puketiro Forest. That's the Transmission Gully highway there. There's a
1719 cloud of dust here. There's a lot. [02.25.26 – nil audio] extent.

1720
1721 You can harvest forestry without failing your target attribute state.

- 1722
1723 How am going for time please? Is it alright to carry on? I don't have a lot more
1724 slides but they are important.
1725
- 1726 Chair: We do have questions, so we do want to leave time for that. I'm conscious of
1727 the next submitter as well.
1728
- 1729 Cairns: I'll be very quick then. What I'm trying to point out here is a number of
1730 substantial forest catchments had very good water quality.
1731
1732 To summarise, it's all there in the earlier submissions in place. I'll stop there and
1733 let you give me some questions, I think. It's all in front of you. Thank you.
1734
- 1735 Wratt: Could you just flick to your summary?
1736
- 1737 Cairns: There's two pages of summary there. The first one?
1738
- 1739 Chair: Thank you very much Mr Cairns. As I understand it you're not disputing that
1740 the black dust test is an appropriate way of measuring suspended sediment in the
1741 water column?
1742
- 1743 Cairns: I think it's the only way of doing it.
1744
- 1745 Chair: As I understand you're saying that there's at times not a good correlation
1746 between suspended sediment and visual clarity.
1747
- 1748 Cairns: Correct.
1749
- 1750 Chair: The Council scientists acknowledge that the naturally occurring processes from
1751 the peat land means that in Mangaroa visual clarity is lower, and so they've
1752 factored that into a lower target attribute state for the Mangaroa monitoring
1753 point.
1754
1755 Then I also get the subsequent point you make that there would be a whole lot
1756 of contributing factors to suspended sediment, and innocent parties shouldn't be
1757 penalised, which is I think how you framed it.
1758
- 1759 My understanding is that the provisions in Hearing Stream 3, the rural chapter
1760 are going to place requirements on a range of land use activities, and we'll hear
1761 your points about how you say that impacts forestry at that point, but as I see it,
1762 there's very much an idea of collective responsibility for people in the
1763 catchment. Is the main concern that the monitoring point at this location is not
1764 the best monitoring point to be assessing sediment loading upstream of the
1765 catchment?
1766 [02.30.05]
- 1767 Cairns: I don't think it should be the only point. I think if there are going to be failures
1768 with significant financial (I will use the word) 'penalties' but implications if you
1769 like, say stopping a harvest it's not really practical to tell a harvester to [02.30.28]
1770 when the catchment that's draining their forest is meeting target attribute state
1771 of visual clarity.
1772
1773 The reasons for failure downstream might be something else.

1774
1775 Just coming back a stage, the various laboratory methods for we'll call them
1776 surrogate methods, so total suspended solids, [02.30.57] attenuation and so on
1777 don't directly measure clarity; they are surrogate tests that look at suspended
1778 solids in different ways and different accuracies.
1779
1780 The Whaitua Committees and others have agreed that the bottom line thing is
1781 meeting medium visual clarity, which there's only way to measure that.
1782
1783 I think before you apply significant financial penalties on land use types there
1784 needs to be a reasonable level of evidence that they're not complying. Social
1785 responsibility and collective responsibility and yes we all have to do our bit, but
1786 I don't see why everyone should be 'pinged'. It's only forestry that's the
1787 controlled activity. The pastoral farming has freshwater plans and so on, but it's
1788 not a controlled activity.
1789
1790 Chair: Thank you. I will see if anyone else has any questions.
1791
1792 Kake: Thank you for your presentation. No questions from me, but just acknowledging
1793 we'll get into this discussion at the next hearing as well, quite substantially.
1794
1795 McGarry: Mr Cairns, I'm just wondering if you've read Mr Blyth's and Dr Valois'
1796 rebuttal?
1797
1798 Cairns: I did. I don't have it in front of me. I did read it, yes.
1799
1800 McGarry: I'm just struggling with the slide that you said Mr Blyth said there wasn't a good
1801 fit, because his rebuttal very clearly says there is a good fit and it's based on 43
1802 peered samples. Then Dr Valois we particularly asked questions around whether
1803 this should be an interim limit and she said that she was very confident that the
1804 samples have captured seasonal variation, but what it hadn't captured was over
1805 the 95th percentile, which is those very high flows, and in her view CDOM would
1806 be a very small proportion given the high sediment loads and those very high
1807 flows.
1808
1809 I'm struggling with your slide that says that he agrees with Dr Hicks that it's not
1810 a good fit.
1811
1812 Cairns: In one of Mr Blyth's earlier statements he alluded to the method of uncertainty
1813 below TSS of 10mgs per litre. The calibration lines that they used earlier covered
1814 the full range of suspended solids and visual clarity. That was where the formula
1815 used to calculate percent reductions came from the whole line.
1816
1817 What I and Dr Hicks are saying is that it is very important if you want to meet
1818 visual clarity that that fit between total suspended solids and visual clarity is a
1819 good fit at that low flow level, where the target attribute state (and on this
1820 particular graph I will just put it in front of us here) it would 2.2 metres and not
1821 1.67 metres because of the way it is – right in the middle of the curve.
1822
1823 Mr Blyth is ignoring the caveat that Dr Hicks has expressed about needing a
1824 good fit at that critical point.
1825

- 1826 McGarry: Thank you sir. Thanks for providing Dr Hicks' paper. I will look at that with
1827 great interest. Thank you.
1828
- 1829 Cairns: There was one last point there from Dr Valois. Her data she says that the
1830 proportional contribution from coloured dark organic matter was constant, when
1831 in fact even her nine points there was a factor of two variation. A factor of two
1832 is quite a lot in terms of setting a target attribute state. That was from her nine
1833 or ten points that she had available for that.
1834
- 1835 We don't know how much that variation will change over the season.
1836
- 1837 McGarry: As I say, we did specifically ask her about that and she was very confident that
1838 she caught seasonal variation, but what she hadn't caught was those high flows.
1839 Thank you.
1840
- 1841 Chair: Thank you Mr Cairns. We are over time so we do need to end there. I think that
1842 the Council scientists will review the transcript and they will respond to the
1843 points you've made in their reply. I think you have explained the areas of
1844 disagreement clearly. There will be further information coming in response.
1845
- 1846 If there is any sort of particular point that you would like the scientists to... I
1847 guess if you've got any final questions.
1848
- 1849 Cairns: I'll ask them to give Murray Hicks a ring.
1850
- 1851 Chair: The difficult we've got obviously is that Mr Hicks hasn't presented evidence.
1852
- 1853 Cairns: Yes, I do understand the shortcomings of that, yes.
1854
- 1855 Chair: Thank you for the information. We will ask the Council team to consider it.
1856
- 1857 Cairns: Thank you very much.
1858
- 1859 Chair: Thank you very much.
1860
- 1861 **Royal Forest & Bird Protection Society of New Zealand**
1862
- 1863 Chair: We welcome Royal Forest & Bird Protection Society. Sorry we have kept you
1864 waiting. As I understand it there is a little bit of [02.37.26 – nil audio].
1865
- 1866 Welcome. Shall we do some introductions?
1867
- 1868 F&B: Yes that would be helpful. I've got printed copies of our speaking notes so I'll
1869 pass them over to Josh.
1870
- 1871 Chair: Kia ora. Ko Dhilum Nightingale tōku ingoa. I'm a Barrister and Independent
1872 Commissioner and am chairing both the freshwater panel and the Part 1
1873 Schedule 1 panel. Welcome. I will pass over to our Deputy Chair.
1874
- 1875 McGarry: Good morning. My name is Sharon McGarry. I'm an Independent
1876 Commissioner based in Ōtautahi, Christchurch.
1877

- 1878 Kake: Kia ora. Puawai Kake, Planner and Independent Commissioner based in
1879 Northland, Te Tai Tokerau.
1880
- 1881 Wratt: Kia ora. Gillian Watt. Independent Commissioner based in Whakatu, Nelson.
1882
- 1883 Stevenson: Kia ora. I'm Sarah Stevenson, an Independent Planner and Commissioner based
1884 here in Te Whanganui-a-Tara, Wellington.
1885
- 1886 Downing: Tēnā koutou katoa. Ko May Downing tōku ingoa. [02.39.33] Forest & Bird.
1887 With me today I've got some excellent flankers, I've got Mr Tom Kay and Ms
1888 Samantha Dowse, Planner – and Tom in his capacity as a freshwater ecologist.
1889
- 1890 Chair: Thank you. Welcome. We've read obviously Forest & Bird's submission and
1891 the two evidence statements and your legal submissions. We've just been given
1892 some speaking notes. Thank you. We'll pass over to you.
1893 [02.40.05]
- 1894 Downing: Thank you. I will take you through the speaking notes, that's probably easiest.
1895 It might be helpful to make more sense of the speaking notes if you've got
1896 Appendix 2 of the recommended amendments attached to the rebuttal on hand.
1897
- 1898 Chair: [02.40.22 – nil audio] the rebuttal version, but there have been changes that have
1899 been made to that.
1900
- 1901 Downing: Apologies.
1902
- 1903 Chair: That's fine. They were only put online this morning. Perhaps maybe where we
1904 notice that a point you're making has now been accepted by the officer we might
1905 just note that for you.
1906
- 1907 Downing: That would be helpful, thank you.
1908
- 1909 Paragraph 1: Forest & Bird's concerns are narrowing following rebuttal
1910 evidence of Mary O'Callahan on behalf of Wellington Regional Council dated
1911 28 March 2025. However, some outstanding issues remain which are addressed
1912 in this presentation.
1913
- 1914 I will just talk through three major points that I've identified. The first is the use
1915 of 'deteriorated' instead of 'degraded'. In my submission "degraded" is still the
1916 appropriate term to use. Ms Dowse's planning evidence will deal with this.
1917
- 1918 I just also point out that the definition of "degraded" isn't exclusive to an FMU
1919 or part of an FMU to which target attributes state applies and extends to include
1920 an FMU or part of the FMU that is less able to provide for "any value described
1921 in Appendix 1A or any other value identified for it under the NOF".
1922
- 1923 This broader construction is consistent with Policy 5. I set that Policy out again
1924 at paragraph 4.
1925
- 1926 There is nothing major in this point. It is just to also acknowledge that Policy 5
1927 is that regional plans cannot provide for anymore degradation in the health and
1928 wellbeing of waterbodies and freshwater ecosystems.
1929

- 1930 I have highlighted in the brackets “including through a national objective
1931 framework,” to demonstrate that the national objectives framework is a key but
1932 not sole vehicle to achieving this.
1933
- 1934 The next point relates to Objective WH.01 and that again [02.42.46 – nil audio]
1935 and the first is the introduction of the terms “to the extent practicable”. In the
1936 speaking notes, and again these provisions are set out in my legal submissions,
1937 I just note that natural form and character is also recognised in the Regional
1938 Policy Statement and the RPS doesn’t include that qualification.
1939
- 1940 The other aspect of that, that I have to add, is that I understand that hasn’t been
1941 appealed, those provisions under the RPS, because they were under the
1942 freshwater planning process.
1943
- 1944 Having another look at this morning, and I’m not sure if this a provision that has
1945 been revised, but we understand that this is response to the submission by or the
1946 evidence of Wellington Airport who acknowledge that there are parts where
1947 natural character is already degraded; so if you’ve got a permanent structure then
1948 it makes it hard to restore to some previous form.
1949
- 1950 So we did think if “to the extent practicable” was to be retained it might need to
1951 sit somewhere else in the sentence. So where you’re talking about restoration
1952 where there’s deterioration then it might be okay to refer to the extent
1953 practicable, but when you’re talking about maintenance we don’t think that
1954 qualification is really something that’s envisaged by the higher order policy
1955 documents.
1956
- 1957 The next point was regarding the third bullet point, which refers to “all rivers
1958 and lakes and their margins, natural wetlands, ground water and coastal waters
1959 have healthy functioning ecosystems and their water conditions and habitats
1960 support the presence, abundance, survival and recovery of at-risk and threatened
1961 species and taonga species,” and the introduction of the terms “where naturally
1962 present in those environments,” in my submission that could raise some
1963 problems.
1964
- 1965 [02.45.20] It leaves room for lawyers and ecologists to argue what does it mean if it's
1966 naturally present? Does it mean the species were naturally present in a pre-
1967 human state, or does it mean they were recently naturally present?”
1968
- 1969 Chair: Sorry to interrupt Ms Downing but this is one where the Officer is now
1970 recommending a change; so it would say “taonga species where they would have
1971 naturally occurred.” I appreciate you might not be able to respond on the fly
1972 about that but just noting there is a word change recommendation there.
1973
- 1974 Downing: I think Forest & Bird, the third issue with that, and it could be a question that
1975 Tom could talk to I think, or Mr Kay could talk to, it's in his wheel-house with
1976 his ecological background.
1977
- 1978 Chair: We’ll just get you the revised wording so at least you’ve got that there.
1979
- 1980 Downing: People undertaking these translocations tasks will be required to move these
1981 species into an area that can still sustain them. It might be that a waterbody never

1982 sustained a species but it could potentially provide that last refuge for a
 1983 threatened or at-risk species and therefore in my submission it is still worthy of
 1984 that protection.
 1985
 1986 Moving onto the next page, Objectives WH.10 and P.07, Forest & Bird is
 1987 pleased to see interim targets recommended in these objectives, but we've
 1988 identified some elements of the drafting that cause concern.
 1989
 1990 The redrafted objectives leave room for future debate and may lead to
 1991 unintended outcomes which do not achieve the NSP-FM objectives.
 1992
 1993 I probably can talk through WH.10, but before I do, I will just double-check if
 1994 that was something that's recently been revised.
 1995
 1996 'No revision' so that's easy.
 1997
 1998 The first point I have identified is in clause (a) it refers to "no deteriorating trend
 1999 is sought by 2030." In my submission that language is no longer as directive; so
 2000 to "seek no deterioration" provides less certainty than to direct that there is no
 2001 further decline.
 2002
 2003 Then the second point identified is (i) and (ii) – that phrase that "the state of that
 2004 attribute must be improved by 50 percent of the overall improvement required
 2005 in the part freshwater management unit."
 2006
 2007 The reference to overall improvement is unclear. It could be read as enabling
 2008 some parts of the part FMU to decline if other parts are improved. This is akin
 2009 to the "unders and overs" approach which Judge Thompson's division of the
 2010 Environment Court and Ngāti Kahungunu and Hawkes Bay Regional Council
 2011 found was legally incorrect.
 2012
 2013 I have set out the footnote 3 where that was addressed, granted that it was dealing
 2014 with the previous NPS-FM, but I think the principle still remains true.
 2015
 2016 In the case the court said that an "unders and overs" approach could result in a
 2017 more degraded and unacceptable water outcome. So for example it does not
 2018 address localised effects and may be a poor way to manage cumulative adverse
 2019 effects of multiple activities.
 2020
 2021 Chapter 3.4 of the Greater Wellington RPS intro states that the region's range of
 2022 uses and values leads to multiple pressures on the quantity and quality of
 2023 freshwater which can cumulatively impact on the availability and value of the
 2024 resource for use.
 2025 [02.50.35]
 2026 It's also unclear how overall improvement would be monitored.
 2027
 2028 The last thing is just the note, which on first reading looks like it provides more
 2029 than guidance. The note does look like it contains substantive material which
 2030 may need to go into the body of the objective itself. Otherwise, again it could be
 2031 fine but it does leave it open for debate as to whether it has legal force or not.
 2032

2033 I might, if I may, move onto the first witness Mr Kay – unless the Panel has
 2034 questions, or would you rather ask them at the end?
 2035
 2036 Chair: Maybe we'll wait. We'll ask them at the end. Thanks.
 2037
 2038 Downing: Mr Kay, your full name is Thomas James Kay?
 2039
 2040 Kay: Correct.
 2041
 2042 Downing: You've prepared a statement of evidence dated 14th March 2025?
 2043
 2044 Kay: Yes.
 2045
 2046 Downing: Could you confirm that the evidence is true and correct to the best of your
 2047 knowledge?
 2048
 2049 Kay: Yes, with some minor...
 2050
 2051 Downing: You have corrections?
 2052
 2053 Kay: Minor corrections.
 2054
 2055 Firstly, paragraph 3 notes that I work at Forest & Bird. Until Friday I did. I no
 2056 longer work for Forest & Bird. I can give you specific words there if you need
 2057 them, but otherwise that's just a note.
 2058
 2059 Then at paragraph 16(c) I refer to "riffles, runs and pools" instead of "riffles" it
 2060 should be "instead of ripples" which you had probably already figured out.
 2061 Otherwise correct.
 2062
 2063 Downing: Thanks. Please remain and answer any questions of the Panel.
 2064
 2065 Kay: Just in brief before if you do have any questions, or if you want to save them to
 2066 the end that's fine. I have basically provided this evidence in quite a narrow
 2067 sense, in terms of the connection between ecosystem health and natural form
 2068 and character.
 2069
 2070 As I understand it, from the rebuttal evidence there's no competing perspectives
 2071 on that, and no subsequent changes to revert back out referring to that connection
 2072 that's been put in. But, I can be corrected on that if I have missed something.
 2073
 2074 I haven't addressed the wider ecological issues. Happy to take some questions
 2075 on them if there's something I might be able to help with, but I should note that
 2076 I haven't gone into the depths of all the other target attribute states and things
 2077 like that, so I'm probably of limited use from a broad perspective over the plan.
 2078
 2079 In summary, I think it's hopefully quite straight forward from my evidence that
 2080 there's a very clear and inherent connection between natural form and character
 2081 and ecosystem health, both in terms of how it's treated across the science and in
 2082 terms of how it's treated in the NPS-FM, and improvements to those ecosystem
 2083 health variables will naturally be linked to improvements in the natural form and
 2084 character perspective – whether you're considering it as natural form and

2085 character under the NPS or how you would refer to it from a geomorphological
 2086 perspective.
 2087
 2088 That’s probably all I really need to say. If you have questions we can take them
 2089 afterwards.
 2090
 2091 Chair: Thank you. Shall we hear from Ms Dowse? You’re welcome to affirm or swear,
 2092 but otherwise we are very happy.
 2093
 2094 Downing: Great. I think it was more for Tom because he did have that significant change
 2095 to make.
 2096
 2097 Chair: No problem. Thank you very much.
 2098
 2099 Downing: I’ll let you take the lead.
 2100
 2101 Dowse: I’ll take my evidence as read. I have some speaking notes which you’ve got. I
 2102 will take you through those before you have any questions.
 2103 You know who I am so I will skip over that first paragraph, except to say that I
 2104 prepared planning evidence on behalf of Forest & Bird on the ecosystem health
 2105 and objectives, for which their submissions sought amendments.
 2106
 2107 [02.55.00] My evidence covered natural form and character in objectives, the use of
 2108 “deteriorated” rather than “degraded”; drafting of objectives and policies for
 2109 greater consistency with PC1 and NPS-FM provisions; drafting of Policies
 2110 WH.P1 and P.P1 to ensure maintenance of aquatic, ecosystem, health and
 2111 waterbodies that are not degraded are included.
 2112
 2113 The appropriateness and drafting of financial contributions.
 2114
 2115 I have read the rebuttal evidence of Ms O’Callahan. I agree with many of her
 2116 responses and recommend further amendments. However, I have a different
 2117 view on the following matters, being: the use of “deteriorated” rather than
 2118 “degraded” and the addition of maintenance to Policies WH.P1 and P.P1. That
 2119 is just a minor point in relation to where it sits in the Policy.
 2120
 2121 At paragraph 4 now and natural form and character.
 2122
 2123 One of the primary focuses of my evidence was natural form and character. As
 2124 set out in paragraphs 11-19 and 36-47, natural form and character is relevant to
 2125 PC 1 provisions for two reasons.
 2126
 2127 Firstly, as set out in Mr Kay’s evidence, natural form and character are
 2128 intrinsically linked to the compulsory value of ecosystem health. Secondly, the
 2129 NPS-FM requires the Regional Council to consider whether other values
 2130 including natural form and character apply to the Whaitua.
 2131
 2132 Through the Whaitua committee process, community engagement and plan
 2133 making process Council found natural form and character are a value that do
 2134 apply to both Whaitua.
 2135
 2136 I’m at paragraph 5 now and the use of ‘deteriorated’ rather than ‘degraded’

2137
2138 In my Evidence in Chief, at paragraphs 21-26 and 53-54, I recommend the use
2139 of degraded rather than deteriorated in Objective WH.O1 and policies WH.P1
2140 and P.P1.

2141
2142 I have read Ms. O’Callahan’s rebuttal evidence where she has responded to my
2143 evidence. I acknowledge her reasoning for considering the use of deteriorated
2144 more appropriate.

2145
2146 I have reviewed the NPS-FM definition of "degraded". I disagree “degraded”
2147 only refers to when target attribute states are below a national bottom line or not
2148 meeting target states.

2149
2150 The definition at clause 1.4 of the NPS-FM provides three ways in which an
2151 FMU or part of an FMU is considered degraded, including: (c) The FMU or part
2152 of the FMU is less able (when compared to 7 September 2017) to provide for
2153 any value described in Appendix 1A or any other value identified for it under
2154 the NOF.

2155
2156 In my evidence, at paragraphs 40-47, I established that natural form and
2157 character were identified values through the NOF process. In the case of policies
2158 WH.P1 and P.P1, I consider aquatic ecosystem health to be the compulsory
2159 value of ecosystem health described in Appendix 1A of the NPS-FM.

2160
2161 The NPS-FM definition of “degraded” does not just relate to target attribute
2162 states, but values too. I maintain "degraded" remains the more appropriate term
2163 to use in the objectives and policies given these provisions cover Appendix 1A
2164 values and values identified through the NOF process.

2165
2166 I’m at paragraph 9 now - Objectives WH.O10 and P.O7

2167
2168 At paragraphs 48-52 of my evidence I covered these objectives. I recommended
2169 rewording to include all other waterbodies and their margins. Ms. O’Callahan
2170 has recommended these objectives be redrafted so their intended purpose is
2171 better reflected. I agree with this and support this recommendation. However, I
2172 think there are opportunities to make these objectives clearer. Should the Panel
2173 wish, I am happy to work with Ms. O’Callahan on this.

2174
2175 Policies WH.P1 and P.P1 – I’m at paragraph 10 now.

2176
2177 At paragraphs 55-57 of my evidence I recommend refining the chapeau of the
2178 policies so that “maintenance” of aquatic ecosystem health is covered in addition
2179 to degradation. This ensures there are no gaps in the policy framework.

2180
2181 I agree with Ms. O’Callahan’s recommendation to address maintenance within
2182 these policies. However, I consider that maintenance should be included in the
2183 chapeau of these policies rather than after the chapeau and the list of
2184 improvement actions, which respond to degradation.

2185
2186 This is because a chapeau outlines the scope and purpose of a policy, and placing
2187 key matters within it ensures the policy’s intent is clear from the outset. This

2188 helps avoid potential misunderstandings that might arise if such intent were
 2189 introduced later.
 2190
 2191 I'm at paragraph 13 now.
 2192
 2193 I want to acknowledge that my evidence and speaking notes today have been
 2194 narrow in scope. This is a direct reflection of Ms O'Callahan's and the Greater
 2195 Wellington Regional Council's experts thorough and well-considered approach
 2196 to date.
 2197
 2198 I am happy to take any questions the panel may have.
 2199
 2200 Chair: Thank you very much.
 2201 [03.00.00]
 2202 Chair: Mr Kay, your evidence I think explains really clearly for me that the relation of
 2203 the connection between natural form and character, habitat and ecosystem
 2204 health. Thank you.
 2205
 2206 I know we are hearing from Fish & Game I think on Tuesday and I think they
 2207 make the same point.
 2208
 2209 In terms of this issue is the remaining point of disagreement the "degraded" and
 2210 "deteriorated". From my reading of the provisions they do acknowledge the
 2211 connection between the two.
 2212
 2213 Kay: That's my understanding, which would then be a question for these two probably
 2214 as to which word.
 2215
 2216 Chair: I just want to understand that that is the remaining point.
 2217
 2218 Kay: Yes, there weren't any further points raised in response to my evidence.
 2219
 2220 Downing: Probably if I could add that addition of the qualifier "to the extent practicable".
 2221
 2222 Kay: Yes, sorry, that's a subsequent change.
 2223
 2224 Chair: Sorry Ms O'Callahan, did you have a comment on that.
 2225
 2226 O'Callahan: I'm just wanting to clarify [03.01.44 – nil audio]
 2227
 2228 Chair: Yes, so that in that version you've just handed up, that second bullet point is
 2229 changed, but I understand that in relation to natural form and character you want
 2230 "to the extent practicable" deleted?
 2231
 2232 Downing: Correct.
 2233
 2234 Chair: The point you make about the higher order instrument, that's always there. I
 2235 don't immediately have those policies in front of me, but...
 2236
 2237 Downing: I did footnote them if that's helpful. They're in the footnote.
 2238
 2239 Chair: Of your speaking notes?

2240
 2241 Downing: Of the speaking note.
 2242
 2243 [End of Part 2 recording – 03.02.39]
 2244 [Hearing Stream 2 – Day 5 – Part 3]
 2245
 2246
 2247 Downing: Note 1 in the legal submissions, paragraph 12 of the legal submissions as well.
 2248
 2249 Chair: What’s that? Recognise... [nil audio 00.41]
 2250
 2251 Downing: 18(h) might illustrate it more clearly. That says, “Rules and methods that give
 2252 effect to te mana o te wai and in doing so maintain and improve the health and
 2253 wellbeing of waterbodies and freshwater ecosystems including by retaining
 2254 natural features such as pools, run [01.16 – nil audio].
 2255
 2256 Chair: Again that first bullet point, it's possibly arguable that “to the extent practicable”
 2257 applies to fresh waterbodies that are deteriorated and not actually a natural
 2258 forming character. Āhua is restored where deteriorated is the first part in that to
 2259 the extent practicable applies to the second part, but I don’t think that is the
 2260 officer’s intention.
 2261
 2262 I think we understand the point and the reference back to the RPS is really
 2263 helpful. I did see that in your original legal submission. We will just reflect on
 2264 that some more, unless anyone has any questions about that particular point.
 2265
 2266 McGarry: The internet was cutting out and forgive me but I think I’ve just missed this
 2267 point. Is the concern in terms of “where practicable” only in relation to bullet
 2268 point one? Is that clarified? Will it cut out, or is it both referenced in bullet point
 2269 one and two?
 2270
 2271 Downing: It's more in bullet point one. We do take the point that it stems from which is
 2272 that in some instances... sorry, this is really poor paraphrasing of that evidence
 2273 but that in some instances there will be a permanent structure, which means it's
 2274 just not practicable to restore to a former state. But, one way around it we
 2275 thought would be to move to the extent practicable after “where deteriorated”.
 2276 So that āhua is restored where deteriorated to the extent practicable, and then
 2277 leaving the rest as it is, so that where fresh waterbodies are exhibiting natural
 2278 quality rhythms they can be left to do so.
 2279
 2280 McGarry: We asked a few questions during this week of Ms O’Callahan and whether there
 2281 was a difference where practicable and where possible. I just wondered if “where
 2282 possible” was in fact a higher threshold, whereas “where practicable” brings in
 2283 technical concerns. I just wondered whether you’ve got a view. I know you have
 2284 referred back to the wording in the NPS, but just a view whether you see there’s
 2285 a different threshold for “where possible” and “where practicable”.
 2286
 2287 Downing: I do. Sorry, you cut out for a bit. I think summary your question is what’s the
 2288 difference between where practicable and where possible?
 2289
 2290 Where practicable introduces cost elements and where possible is a higher
 2291 threshold to meet, and where you can do it you have to do it. It would be no

- 2292 surprises that Forest & Bird always prefers where possible in these instances. If
 2293 that was being considered it's something we would endorse.
 2294
- 2295 Chair: It's certainly been something we have discussed as Commissioner McGarry has
 2296 said. We have also discussed the other provisions in the operative plan which
 2297 are not on the table for PC1, which recognises not only the benefits of RSI but
 2298 also their technical and operational constraints. If that provision is of concern to
 2299 RSI they do have that other policy support.
 2300
- 2301 Downing: Yes, I didn't think about that, that's a really good point. Read accumulatively
 2302 there would still be that ability to provide for that.
 2303
- 2304 Chair: We'll definitely give the point some further thought. I feel like I should know
 2305 the High Court cases that you have referred to.
 2306
- 2307 Downing: [05.47] is Tauranga Environmental Protection Society.
 2308
- 2309 Chair: The Transpower case?
 2310
- 2311 Downing: The Transpower case, yes.
 2312
- 2313 McGarry: One other change that the officer has agreed to in bullet point three, which would
 2314 be to replace "coastal waters" with the coastal marine area, which kind of just
 2315 gives a nod to the chapeaux; where in the chapeaux it uses the coastal marine
 2316 area and it's not narrowed down to coastal waters. I just wondered what your
 2317 view would be on that change in the third bullet point to the coastal marine area.
 2318
- 2319 Downing: Off the top of my head I actually would endorse that change because coastal
 2320 marine area is predominantly coastal water but I guess there would be those
 2321 elements of the brackish and the freshwater coastal marine areas are arguably
 2322 broader.
 2323
- 2324 McGarry: It does refer to functioning ecosystems and conditions and habitats. It sort of fits
 2325 better. Thank you.
 2326
- 2327 Kake: Thank you for your submissions and thank your speaking notes which clearly
 2328 set out the key points. I think we as a Panel are working through.
 2329
- 2330 I just wanted to ask and this might be a planning question. With respect to the
 2331 new provisions Objectives WH.O10 and P.O7, the inclusion of the wording
 2332 around "all other water bodies". Just acknowledging that we've had some
 2333 discussion [nil audio – 07.53] talks about the importance of the
 2334 interconnectedness of other water bodies. I just wondered if you wanted to
 2335 elaborate on that so we can understand the key matters of contention there.
 2336
- 2337 Downing: I think my point in there I may have got myself in a little bit of a knot. Through
 2338 Ms O'Callahan's rebuttal she has said that policy underneath it sits a whole
 2339 bunch of rules and standards that relate to only I think was it ground water, or
 2340 not the other waterbodies that I was suggesting for inclusion.
 2341

- 2342 Wratt: I would just like to explore a little more of the natural form and character. Ms
2343 Dowse you have referred to that. [Nil audio 09.15] inclusion of reference to
2344 natural form and character?
2345
- 2346 Dowse: No. Just to qualify, I haven't looked down in the later hearing streams at the
2347 revisions that will be dealt with later.
2348
- 2349 Chair: The objective WH.O10, I understand the "overs and unders" concern you've got
2350 drawing from the cases and the words "overall improvement" but given that the
2351 monitoring points are where they are and the Council's modelling has said,
2352 "These are the ones..."
2353 [00.10.20]
2354 For instance, we were talking before about the Mangaroa monitoring point at Te
2355 Marua and I think Dr Greer's evidence drawing on the modelling was that
2356 captures 90 percent of the land use in that catchment.
2357
- 2358 Given that monitoring can't take place everywhere, there are limitations on how
2359 it occurs, what other options are there. I understand the unders and overs point
2360 but if someone in one area is complying with say the Hearing Stream 3 rules
2361 around land use and they've got their consent and they're contributing towards
2362 achieving the TAS, but someone somewhere else isn't. That can only be picked
2363 up through that consenting framework, right? So I understand the unders and
2364 overs but practically how else can it occur. You've got to monitor water quality
2365 at a point and that will recognise that there will be some people that are
2366 complying and some people that are not. You can only really manage that
2367 through consenting status and managing activities in that way.
2368
- 2369 Do you have any other views on how?
2370
- 2371 Downing: I guess the submission stands in that it ignores a localised effect. This might not
2372 be a very scientifically appropriate example but, say someone is keeping within
2373 their limits for fine sediment and someone else is exceeding it, that person
2374 exceeding it is going to then have an effect on a threatened species.
2375
- 2376 I guess the upshot of Forest & Bird's position on this is just that overall the term
2377 "overall" is not necessary.
2378
- 2379 Is there anything you would like to add from a science perspective, because
2380 you've been more familiar with how things are monitored over time?
2381
- 2382 Kay Only in brief. I have only just been looking at this briefly this morning and it is
2383 confusing, or seems to be to me and I could have this wrong, that it's referring
2384 to specific target attribute states being improved by 50 percent, which are being
2385 monitored at individual sites, but then it adds the qualifier "overall", which is
2386 then generally used across an area and it does refer to the area of the part
2387 freshwater management unit.
2388
- 2389 Again I'm just coming to this fresh, but reading it from an ecological perspective
2390 it is a little bit like, "What is it specifically referencing? Is it an overall
2391 achievement across the part freshwater management unit, or is it specifically a
2392 50 percent improvement in the specific target attribute state and it's specific site

- 2393 as per the table of objectives?" But, you're probably looked at it much more than
 2394 I have and maybe there is an answer to that question.
 2395
- 2396 Chair: I think that is a good point. My understanding is it's the latter. I don't know if
 2397 it's fair to ask Ms O'Callahan if she's got a view on that.
 2398
- 2399 O'Callahan: I was thinking about the pipe network when I wrote the word "overall". I think
 2400 it's superfluous and can come out.
- 2401 Chair: Thank you. Yes, by 50 percent of the improvement required in the part FMU.
 2402
- 2403 Kay: In which case it's referring specifically to each of those target states and
 2404 objective table.
 2405
- 2406 Chair: Yes.
 2407
- 2408 Downing: Just while I have him with the mic, and sorry, I have to jump to another
 2409 provision, if I may, WH.O1 that third bullet, where they would have naturally
 2410 occurred may not account for changes resulting from climate change.
 2411
- 2412 Kay: Just in terms of shifting species distributions that we might see with changing
 2413 water temperatures and things like that for example.
 2414 [00.15.00]
 2415 I'm not sure exactly what words could go in there, but something just to capture
 2416 that that might change naturally. Well, it's human in gest, but change within the
 2417 scope of climate change.
 2418
- 2419 Chair: I can't actually now recall the reason for even needing those words. I would need
 2420 to go back to Ms O'Callahan's evidence on that, unless... because if it ended
 2421 just after "taonga species" the translocation and now the climate change point is
 2422 a good one.
 2423
 2424 I'm pretty sure the officer has talked about this, so I think I need to go back and
 2425 have a look. Thank you. We've noted the point and we'll consider that.
 2426
 2427 The degraded and deteriorated...
 2428
- 2429 Kake: I just want to understand that from a consenting perspective I suppose a little bit
 2430 further. Some of the examples that come to mind, where some of those trans
 2431 locations might happen. I suppose in your experience as an ecologist now some
 2432 of those key threats with respect to that translocation of taonga species of
 2433 threatened species, have you got any comment around some of those aspects?
 2434
- 2435 Kay: In terms of what the threats to those species are and going back to these places?
 2436
- 2437 Kake: Just trans-location in general and considering the effects of climate change and
 2438 perhaps that not being a suitable habitat. I'm not sure just off the top of my head.
 2439
- 2440 Kay: Specifically, and you can tell me if I'm not answering your question correctly,
 2441 or if I'm not getting to the point of it, but the things that initially came to mind
 2442 to me with freshwater ecosystems would be things like shifting ocean
 2443 temperatures which is meaning that a lot of our species are diadrimus, so they
 2444 go upstream and then they go all the way out to sea to breed; where they are then

2445 going in the ocean I understand is changing because of changing ocean
 2446 temperatures. I don't know if that would then change where they come back to,
 2447 but that could mean that they start to prefer different streams when they return.
 2448

2449 Also things like shifting distributions of pest species, pest plants and things and
 2450 the risk of introduction of those pests, like with the Waikato River with the clam
 2451 and things like that.
 2452

2453 So there's a change from both sides; potentially that the species have a different
 2454 preference because of the habitat changing through something like temperature,
 2455 or that there's a new risk introduced through things like pest, plant or aquatic
 2456 plant species or whatever that now can live in those places where they couldn't
 2457 before. This is not necessarily a realistic example but koi karp for example
 2458 generally don't really breed in certain places because of temperatures and things
 2459 like that. It could be that that shifts and then they become a risk, for example.
 2460 That's a hypothetical but that kind of thing.
 2461

2462 Wratt: Could I just explore that a little bit more? So that, for example, might mean that
 2463 if koi karp are expanding in a particular ecosystem that might cause an
 2464 endangered New Zealand indigenous fish to be excluded; so you then might
 2465 want to take that indigenous fish and introduce it somewhere else. Is that an
 2466 example of what you're thinking of?
 2467

2468 Kay: Again it's a hypothetical and just a species that came off the top of my head. But,
 2469 yes, it could mean that for some reason you want a species that we don't know
 2470 whether it was in a habitat in the past to now go somewhere that it wasn't.
 2471

2472 The kind of places where it happens a lot are like Otago with a lot of the land-
 2473 locked galaxiid species and things like that. That seems to be where they are
 2474 thinking more about where they limit trout and salmon getting to and things like
 2475 that. As I understand it, in the North Island we have a bit more of a regular
 2476 distribution and less of those land-locked threatened specific things; but it's
 2477 totally plausible. There has been some work done quite recently by Dr Adam
 2478 Canning looking at what are the expected drops and increases in distribution of
 2479 different native and pest species based on that .Whether that's substantive to
 2480 what the words say is another thing, but it is interesting.
 2481

2482 Wratt: It could also be that with climate change a previous or a current habitat of some
 2483 endangered species isn't suitable any longer, but it may be possible to keep that
 2484 endangered species by shifting it to a new habitat that has now also been changed
 2485 by climate change – temperature for example.
 2486

[00.20.00]

2487 Kay: Feasibly yes.
 2488

2489 Wratt: Again it's just hypothetical but I guess that was the sort of thing I had in mind
 2490 when you were talking about translocations.
 2491

2492 Kay: The reference to healthy ecosystems or ecosystems health maybe captures that
 2493 in the sense of what you're looking for is healthy ecosystems, and that definition
 2494 might shift as some of those other parameters around it shift, the specifics then
 2495 that are listed is up for you grapple with I guess.
 2496

- 2497 Chair: The reporting officer in relation to the natural form and character point in
2498 WH.O1 and O2 does not support including the Appendix 1B specifics into the
2499 natural form and character concept on the basis that PC1 is aimed at achieving
2500 numeric objects and does not manage all these aspects of natural form and
2501 character, such as geomorphological and morphological aspects. Presumably
2502 you disagree with that. This is page-13 of the officer's rebuttal evidence.
2503
- 2504 I was thinking that as you point out, it's not just the numeric is it, it's also the
2505 narrative and the narrative value is in Appendix 1B and that also links to the
2506 point I think you're making about degraded, because it's that Part C of the
2507 definition of degraded which links to 1B.
2508
- 2509 I think the question is of the list of matters that are valued there under natural
2510 form and character that list in (a) to (g) do you have any points on that view
2511 about scope? I think the point the officer is making is that some of these things
2512 in here are just outside the scope of PC1. A hard question I'm sorry.
2513
- 2514 Dowse: I considered this when I was preparing my hearing notes and took Ms
2515 O'Callahan's point that the scope of the PC1 provisions underneath these
2516 objectives and policies don't deal with those matters. I hadn't put any further
2517 thought to it.
2518
- 2519 Chair: I think what I'm probably really asking, and maybe Mr Kay might be able to
2520 help on this, I don't know if I fully understand geomorphological and
2521 morphological aspects is I think what I am trying to get at.
2522
- 2523 Kay: I can come at this from a couple of angles maybe. Purely from an understanding
2524 what WH.O2B is saying is a change in wording could be useful in that at the
2525 moment it says "natural form and character is maintained or where degraded
2526 improvement has been made to the hydrology of rivers, banks stability," so
2527 you're improving the hydrology of rivers, you're improving the bank stability,
2528 and then it implies that you're improving sources of sediment are reduced –
2529 which doesn't actually make much sense from a wording perspective.
2530
- 2531 So I think there is maybe a wording issue that could be cleared up there.
2532
- 2533 The introduction of the full list of things from 1B is I guess sort of a separate
2534 question, as to whether those words are the right ones to put in there.
2535 [00.25.05]
- 2536 I kind of address in my evidence how different parts of the target attribute states
2537 and the plan address many of those things, and this is the inherent struggle and
2538 difficulty that there has been. River management and flood management has
2539 generally been kept separate to ecological matters. You often see entire [25.25]
2540 but you end up with a whole lot of river management activities happening
2541 generally with relative disregard for the ecological and ecosystem health impact.
2542
- 2543 If you look at the biological things, you've got things like the MCI and the fish
2544 measures. If you look at the visual you've got things like suspended sediment.
2545 If you look at physical characteristics you've got deposited sediment. Then those
2546 are addressed in (a).
2547

2548 If you're going down to things like (d) relative dominance of indigenous flora
 2549 and fauna you've got riparian, cultural significant species, you're looking at
 2550 mahinga kai, clarity of the water, and you're looking at things like suspended
 2551 sediments. Then you step back and go, "What does this plan do?" It manages
 2552 land use and whatever which will then affect how run-off is coming down and
 2553 sediment is coming off the hillsides into that river, which then influence the
 2554 geomorphological processes, which is simply the processes that form that river,
 2555 shape and habitat.

2556
 2557 The difficult is that in the way that I read it from an ecological perspective, is
 2558 that that has sort of slipped through the cracks. This is why in some ways I
 2559 struggle to say I'm coming at this as an ecologist or a geomorphologist because
 2560 there's not actually that many people that try and merge those two things
 2561 together, and there's this little grey area that's lost.

2562
 2563 I think there's a lot of value in trying to get the plan to acknowledge that there's
 2564 a connection there, with the limitation maybe that you feel, as I understand from
 2565 the reporting officer's report, that this doesn't change the rules for the activities
 2566 in the beds of lakes, rivers and things. So you can't control what flood protection
 2567 works are happening and the impact of those on natural form and character, but
 2568 a lot of what you are regulating from an ecological perspective will have an
 2569 impact on natural form and character and habitat – if that's helpful.

2570
 2571 Chair: The drafting you've proposed, I know length alone shouldn't mean it shouldn't
 2572 be included, but I was wondering if there is an alternative way of capturing those
 2573 Appendix 1B matters into the drafting; because particularly for WH.O2 it would
 2574 become a very, very long clause.

2575
 2576 It might just be that we need to reflect on that and see if the officer has any views
 2577 on that in reply. I think we get the point and it's well-expressed.

2578
 2579 Shall we just see if anyone else has anything further on natural form and
 2580 character or degraded? I am interested in the officer's view, not now but in reply,
 2581 on that clause (c) issue. Looking again at the rebuttal I think it responds
 2582 specifically to the target attribute states point and not clause (c). We will see if
 2583 that changes anything.

2584
 2585 Does it matter do you think that clause (c) refers specifically to the 7 September
 2586 2017? I don't think it does. I know there's different options for assessing
 2587 baseline and that's just one of them. I don't think it would matter.

2588
 2589 Downing: Sorry is this specifically with reference to natural character?

2590
 2591 Chair: It's the definition of "degraded". Just that clause (c) which I understand you're
 2592 relying on for why "degraded" should be used instead of "deteriorated". It
 2593 compares the situation to September 2017.

2594 [00.30.08]

2595 Dowse: Rather than the baseline monitoring information that Greater Wellington has
 2596 prepared through this plan change.

2597
 2598 Chair: Natural form and character, we're talking about longer term things aren't we.
 2599 The fact it's compared to 2017 probably doesn't matter.

- 2600
2601 Dowse: I would have to go away and think about that.
2602
- 2603 Chair: Anyway, I think the key point is that we will ask if that reference back to the
2604 clause (c) issues changes anything for the officer's assessment.
2605
- 2606 Kay: Sorry, I'm not sure about the full context of the question, but I guess just in brief
2607 one advantage of natural form and character, not necessarily habitat at a really
2608 detailed level, but we have quite good aerial imagery at regular years that if you
2609 wanted to establish a baseline for some point in time, particularly within the last
2610 ten or twenty years, it's actually quite easy to go back and say, "Look the river
2611 was over there, or the channel was this wide," whereas with nitrate monitoring
2612 you go, "We weren't monitoring so we just don't know." We have actually got
2613 points in time that you can revert to if you had to, so that might be useful context.
2614
- 2615 Kake: One last question I wanted to explore. It's a quick one I hope. It might have been
2616 addressed already through some of the rebuttal from the reporting officer. It is
2617 in your planning evidence with respect to the financial contribution, which I
2618 think has been struck out anyway, but just as a general I was interested in the
2619 commentary at paragraph 67 in your evidence around the policies covering
2620 financial contributions and application to the effects management hierarchy.
2621 We've been getting a lot of economic analysis provided to us as well and no
2622 doubt there's going to be some more discussion coming up particularly this
2623 afternoon – I think we've got Wellington Water coming in.
2624
- 2625 Some of the commentary you've made around the financial contributions to I
2626 think it is maybe stormwater you've referenced, we've heard that it's easier to
2627 do this in new urban greenfield development areas, but we've heard that it's
2628 obviously really challenging to retrofit stormwater upgrades in particular. I just
2629 wanted to know if you wanted to elaborate a little bit on your view that you've
2630 expressed there in relation to that policy around financial contributions, and the
2631 reference to the affects management hierarchy.
2632
- 2633 Dowse: I think the key point there is just that the NPS-FM is telling you to apply the
2634 effects management hierarchy and so the policy should indicate that if you
2635 decide not to delete it.
2636
- 2637 Chair: There was one further point, sorry to come back to this, about "degraded". Just
2638 looking at that again – so if the natural form of a river say was artificially
2639 changed quite a long time ago is it relying on clause (c) only saying you need to
2640 assess it compared to how it was in 2017 and the change might have occurred a
2641 lot earlier than that? So actually couldn't it be overly restrictive?
2642
- 2643 I think Ms O'Callahan makes this point in her rebuttal in relation to the 2100
2644 waiora point. Sorry, maybe just the first one.
2645
- 2646 If form and character has changed prior to 2017, you're only requiring it to go
2647 back to how it was in 2017.
- 2648 [00.35.00]
2649 Kay: The difficulty with natural form and character from my perspective and habitat
2650 and that it kind of crosses over, is that in falling through that gap between
2651 ecology and natural character we haven't looked to set targets or community

2652 aspirations for those things. Everything else can have a baseline as its minimum,
 2653 with then a community aspiration. You could be in a (c) band now but the
 2654 community says, “Actually we want (b) or (a) with natural form and character,”
 2655 because the NPS does arguably direct you to come up with targets for that value
 2656 if you consider that value is part of the catchment. Because that hasn’t been done
 2657 necessarily it means there is a gap. It doesn’t tell you how much to restore that
 2658 by.

2659
 2660 You’re right, I think it might be there’s that challenge. A lot of the change to
 2661 natural form and character has been quite historic from the ‘40s onwards with
 2662 flood protection and things like that.

2663
 2664 In an ideal world I think we’d have targets where we would say “This water-
 2665 body we’re going to just maintain its natural form and character because it’s
 2666 currently really high. This waterbody is degraded but practicably we can’t move
 2667 the entirety of Lower Hutt to restore the Hutt River’s floodplain, but the
 2668 Waiwhetu Stream there’s some space to do some stream restoration and
 2669 rehabilitation and put some meanderings in. You would have some sort of
 2670 quantifiable targets. But, because of that difficulty of this plan change affecting
 2671 one thing but not activities of birds at rivers and lakes it difficult to put those in
 2672 out of nowhere.

2673
 2674 Chair: Certainly in the context of the waiora state, which is the longer term of 2100,
 2675 just looking at that first bullet point there, do I have it right that you would prefer
 2676 that to say “āhua natural form and character is restored” and freshwater bodies
 2677 exhibit natural quality... to the extent possible.”
 2678

2679 Downing: That would be a preference to the extent possible if that is to be retained, but
 2680 also if it is to be any kind of notion of where practicable or possible is there, we
 2681 thought it would fit more nicely after “where deteriorated”.

2682
 2683 Chair: I see.

2684
 2685 Downing: “Natural form and character is restored where deteriorated to the extent
 2686 practicable or possible,” and then freshwater bodies exhibit their natural quality,
 2687 [37.52] flows.

2688
 2689 Chair: But, you would still prefer “degraded”?

2690
 2691 Downing: You’ve raised some really good points. We don’t want to land on where we think
 2692 it should go. If there as an opportunity to provide more planning.

2693
 2694 Dowse: I would like to talk with Mr Kay as well before I land on something.

2695
 2696 Chair: We do have the integration stream coming up. I think we have probably given
 2697 quite a lot of airing time – we appreciate it’s an important issue. Let’s see where
 2698 the officer comes back within the reply and then of course there is how this
 2699 objective WH.O2 are going to be implemented as a subject of further hearing
 2700 streams. So we could just see how all of that is shaping and then if you want to
 2701 come back in the integration stream maybe that might be the best approach; only
 2702 because we’ve got Hearing Stream 3 coming up quite soon after this one. I think
 2703 if we allow more time for further evidence and then time for the officers to

2704 respond, I think we are going to be running too close to Hearing Stream 3
 2705 unfortunately. But, that is why we have the integration stream.
 2706

2707 McGarry: I just wonder if they could just reflect after the discussion today and provide
 2708 something in writing in terms of updating what their position is at this point
 2709 perhaps.
 2710

2711 Chair: Sure. We might need that quite soon, just so then the officer can also consider
 2712 that as part of the reply, if that's okay. We're at the end of the week now, but by
 2713 the end of next week if that's possible. That's also Easter.
 2714 [00.40.10]
 2715 Downing: Thank you Commissioner.
 2716

2717 Chair: Thank you so much. Sorry to keep you so long over.
 2718

2719 Downing: That's fine. Thank you.
 2720

2721 Chair: We will take the break now and come back at 1.45pm. Thank you.
 2722
 2723 [Hearing adjourned – 40.35]
 2724 [Hearing resumes – 01.21.00]
 2725

Cawthorn

2726

2727

2728 Chair: Kia ora Ms Cawthorn. Welcome.
 2729
 2730 We will start the session for Day 5 of Hearing Stream 2. Ko Dhilum Nightingale
 2731 tōku ingoa. I'm a Barrister and Independent Commissioner practicing as a
 2732 lawyer for the past 25 years and based in Te Whanganui-a-Tara. I will ask the
 2733 other Commissioners to introduce themselves.
 2734

2735 McGarry: Kia ora. My name is Sharon McGarry. I'm a Hearings Commissioner based in
 2736 Ōtautahi Christchurch.
 2737

2738 Kake: Kia ora. I'm Puawai Kake, a Planner and Independent Commissioner based in
 2739 Northland Te Tai Tokerau.
 2740

2741 Wratt: Kia ora Gillian Wratt. Independent Commissioner based in Whakatū Nelson.
 2742

2743 Stevenson: Ngā mihi nui kia koe. I am Sarah Stevenson, an Independent Planner and
 2744 Commissioner based in here in Te Whanganui-a-Tara, Wellington. Welcome.
 2745

2746 Chair: Ms Cawthorn we have your submission, thank you very much. It's from quite a
 2747 long time ago now, December 2023. We have read that. However you would
 2748 like to present to us we do note that the officer has provided some revised
 2749 recommendations which are now up on the website. A lot of information for this
 2750 hearing stream.
 2751
 2752 If we note that there's a point you're making and we think the officer is
 2753 supporting that, we might just note that once you've presented. Otherwise over
 2754 to you.
 2755

2756 Cawthorn: Kia ora koutou katoa. Thank you very much for the opportunity to speak here. I
 2757 am Isabella. I'm one and a half generation Pākehā from just north of Porirua and
 2758 Plimmerton, regional name of Taupō. I am here in my capacity as a citizen and
 2759 a nerd I guess. I have generally been interested in how we interact with our
 2760 environment and the [01.23.35] instructions that we make to ensure that we tread
 2761 a bit more lightly and get best value, so on and so forth for many years. I even
 2762 run a meet-up called 'Urban Nerds'. That's my principal capacity here.
 2763
 2764 I have had a very brief professional deeper dive into this space. I worked for
 2765 Greater Wellington facilitating Te Awarua-o-Porirua Whaitua Committee in the
 2766 early days, like 2015-16. But, I wasn't involved all the way through. I'm
 2767 bringing that context to essentially bring a little bit of renewed emphasis to the
 2768 points I was making in my original submission, and a bit of just the context now
 2769 that we're getting through the Schedule 1 process where the world is at.
 2770
 2771 I've basically got three big points to make really. One is just a general reiteration
 2772 about the NRP as an instrument for strategic direction setting in the job we need
 2773 it to do, especially now.
 2774
 2775 The second one is around the popular mandate for the proposed water quality
 2776 stuff in the NRP and the mandate at a population level I suppose; sort of a
 2777 regional governance level.
 2778
 2779 Then the final one is around the popular mandate for that content specifically
 2780 developed by the Whaitua processes at a catchment level – the popular mandate
 2781 for that.
 2782 [01.25.00]
 2783
 2784 Forgive me for telling my proverbial grandmothers how to such eggs with any
 2785 of this stuff. I am just wanting to bring the points into the space.
 2786
 2787 Firstly, NRP as an instrument has this really vital job it has to do. It needs to do
 2788 it really thoroughly and we need it to do it really well particularly now. I'm
 2789 talking about this stuff because you'll probably be hearing many arguments that
 2790 because the wider landscape around infrastructure is changing a lot at the
 2791 moment basically that we should probably be a bit more conservative with some
 2792 of the [01.25.35] or we don't know what the structural environment will be at
 2793 local government, even local central. We've got an affordability crisis at the
 2794 moment around infrastructure. We need to be more responsible with spending
 2795 and there's just so much change. Everything is up in the air at the moment.
 2796 There's these new institutions. It would be pre-emptive to set a strong direction
 2797 with all this uncertainty around, so on and so forth. There's a lot of merit in those
 2798 arguments.
 2799 Disruption and change is scary even when it is two things that we love to hate,
 2800 like water regulations and structural local government. There's a lot of instinct
 2801 for us to kind of hunker down.
 2802
 2803 But, all of this change and destruction in infrastructure is precisely because we
 2804 are starting to change a lot of the structural things that have landed New Zealand
 2805 in you're looking at graphs of the LECD and different dimensions of
 2806 infrastructure. We're down in the bad spots New Zealand, like quite a lot. We
 2807 spend quite a lot but we get really poor value for money. We have poor strategic
 alignment between what we spend on with infrastructure and the things we say

2808 we want to do. We get poor value for money in construction delivery and
2809 outcomes. All of these things are not just for water by any stretch, but they are
2810 making big contributions to the tough state we find ourselves in with water
2811 quality right now and why it's hard and expensive to make things better.

2812
2813 The big reforms in play making it really uncertain at the moment, everything
2814 from structural local government, central government, infrastructure funding
2815 and financing, spatial planning, combinations of all of that, that uncertain
2816 environment is precisely because things are finally starting to get changed and
2817 that actually makes a stronger case for our strategic directions to be really clear
2818 and strong and unequivocal to help us have a navigational star through all of that
2819 churn and mess.

2820
2821 You know this better than many I suppose, but it's worth reminding, what is the
2822 power of a really strong strategic direction even in normal times let alone really
2823 swirly and churning structural times. It tells what the point is of doing all that
2824 structural stuff. It tells us what tangibly is the better world that we are aiming
2825 for with all these structural reforms, investment and all the good stuff.

2826
2827 It says, "This is how our lives are going to be better at point x." It helps us set a
2828 course. It's not a precise course dictated out minute by minute with little GPS
2829 points every mile, it's an arc of the compass. This is like Pacific navigation. This
2830 is large scale journeying as a nation. Good strategic direction provides a clear
2831 description of that promised land which is over the horizon and it provides
2832 navigation points along the way; so that as we head across different latitudes we
2833 can tell if we are getting off course. Wherever that strategic direction is, present
2834 case it's in the NRP, it has to be clear, it has to be strong, it has to be long-term
2835 so over the horizon and it has to be really unequivocal. The fact that we might
2836 fail to get to one of our weigh points exactly when we wanted to is actually okay,
2837 because we know where we are going and we can get better at travelling on the
2838 way. We can get better at the how stuff.

2839
2840 Having a clear direction of where we are going doesn't magically fix all of those
2841 how's and magically get us consensus on all those tricky details, but it unblocks
2842 us all those really tricky and important conversations; and lots of them are ones
2843 that are starting to happen right now.

2844
2845 I will just pull out a couple of examples. One tricky important conversation is
2846 what should be in a non-partisan pipeline of genuinely essential consensus
2847 infrastructure for our region? A big live conversation. That pipeline would be a
2848 great thing to have. It would allow us to do all sorts of things around
2849 infrastructure investment in a coordinated way which would make the OCD
2850 graphs look a lot better for us and make us genuinely happier.

2851 [01.30.00]

2852 It would help us figure things out around what workers might we need, what
2853 regulatory screens, what different kinds of investment do we need, do we want
2854 to do big wastewater treatment plan or do we want to do lots of distributed
2855 sewerage infrastructure and what are the mechanisms for that investment. How
2856 we're developing – how much outputs, how much outwards, how much
2857 retreating.

2858

2859 That pipeline would be a great thing but good luck trying to get one if we don't
2860 know where we are going with water quality.

2861
2862 Same thing for another big conversation of funding and financing. What should
2863 be the funding and financing framework for Wellington for infrastructure? What
2864 tools should we be using in what places? How do we want to leverage
2865 renewals versus using debt finance? How much do we want to [01.30.52]
2866 vehicles and financing things we don't even know about yet?

2867
2868 These are conversations in which there's a really hard core which we can't
2869 outsource to scientists, economists or spatial plans or technical people, and that's
2870 a conversation about distributional equity, right? A fancy economics term for
2871 who is bearing the burdens and who's enjoying the benefits – are across society
2872 now and out towards our children and their children.

2873
2874 Again, you have as much technical conversation as you like but good luck
2875 landing it and getting into that really hard stuff about distributional equity if you
2876 don't know where you're going and why you're going there.

2877
2878 All of this, don't take it from me, take it from the DIA in water economics and
2879 Water New Zealand, Infrastructure New Zealand, Treasuries, National
2880 Infrastructure [01.31.46] OCD according to our Land & Water National Science
2881 Challenge and the list goes on.

2882
2883 Clear, strong, unequivocal, long-term direction setting from the NRP is very
2884 important.

2885
2886 You're going to hear lots of very articulate and well-reasoned arguments to make
2887 a few little tweaks here and there. "Look, it's too expensive, it's too difficult to
2888 reduce sediment loading from development or sediment loading for forestry at
2889 the pace it's proposed in the Whaitua Chapters, so could we just dial that back a
2890 little bit." Or, in terms of the old E.coli counts and the bands we're going to get
2891 one decent storm and it's going to ruin all our stats; we've got so many cross-
2892 connections; it's just the current state, so can we just shift the band down a little
2893 bit?" It's reasonableness, affordability and all of these good words.

2894
2895 Or, "Look, we can't be imposing extra costs on housing developers in a housing
2896 crisis. It's just not the time."

2897
2898 All these little tweaks may be sold to you as little bit collectively they take what
2899 is currently proposed as a strong long-term clear unequivocal direction and they
2900 introduce inconsistency, they introduce fudging, they introduce hedging, and
2901 I've outlined already what happens if we try to have big important conversations
2902 and try to move forward as a nation and fix all those structural problems without
2903 that clear direction of where we are going.

2904
2905 And, let us remember – and again, sorry for teaching you how to suck eggs – it
2906 is the job of the NRP to set a course, to set a destination and some navigation
2907 points. It's not a budgeting document, it's a direction setting document. And,
2908 again lest we forget, within our legal framework (because yay, laws and rules
2909 still do mean something in New Zealand at least) under the NPS-FM we have

2910 that obligation to maintain or improve. If you kind of bullshit on that you're
2911 abrogating responsibility to manifest the intent purpose of the law.

2912
2913 So, all in all, combine that with the importance of good strategic direction setting
2914 and it's going to need a very good reason, a really compelling reason, to weaken
2915 what is currently proposed in terms of water quality bits [01.33.54].

2916
2917 Moving on now from the technical and procedural stuff to the other side of the
2918 coin of the government activity, which is your democratic mandate [01.34.06].

2919
2920 I have got two points to make here. The first one is at that population level, kind
2921 of at the regional governance level; and the second one is about the specific
2922 catchments. I'll box on real quick.

2923
2924 Again these pressures will come up of "Goodness, are we really sure we should
2925 be doing this right now? There's a massive costs of living crisis. It's very
2926 expensive. It's going to be very difficult. It's going to piss off a lot of people."
2927 But, for once you can be confident in that setting a strong direction with those
2928 proposed Waitua generated bits of material this is greater Wellington doing its
2929 job, exercising good leadership as an entity of government. And, the reason you
2930 can feel confident about this is that around the world when ordinary people are
2931 surveyed 'properly' about what they deeply value and they're big priorities,
2932 what comes up again and again in the top five, regardless of the economic cycle,
2933 regardless of the affluence of the community concerned or the country you
2934 surveying in, what's in that top five over and over again is protecting the life
2935 supporting capacity of water and water ecosystems – again and again and again
2936 throughout modern history.

2937 [01.35.25]

2938 There's a huge amount of research on this. Loads of citations I can point you to.
2939 New stuff coming through all the time simply emphasising the point. There are
2940 very few universal things in this world, but that is one of them.

2941
2942 There's an interesting contrast here, because when you ask people simply what
2943 they care about the most, or what they are most concerned about, or you ask
2944 them to rank investments, things go up and down. Right now for example, I think
2945 there's that new [01.35.55] survey that says there's a lot more concern around
2946 hospitals and medical care access. And, when there was a lot of talk about ram-
2947 raids and other high profile violent crime, there was a lot more concern about
2948 crime and safety – that bubbled up. If you ask people about a percentage increase
2949 in their rates in the next LTP again it's predictable answers.

2950
2951 These are valid questions, but they don't actually illicit what people generally
2952 care about big picture. What they generally want to know, what their children
2953 and grandchildren are being left with, it's that stuff, that large scale long-term
2954 stuff that is the sole preserve of government for better or worse. Even libertarians
2955 will grudgingly admit that point.

2956
2957 Given that when most people were asked properly about what they value most
2958 for their children and their grandchildren, here nation-wide, worldwide, it's that
2959 life supporting capacity of water, waterways, water ecosystems.

2960

2961 Greater Wellington can feel confident that there is that popular mandate for a
2962 strong, clear unequivocal strategic direction on water quality.

2963
2964 But, it gets better – and this is my last point.

2965
2966 The third reason why you can feel confident from a democratic legitimacy
2967 perspective in these Whaitua generated chapters is those bits have been
2968 developed by a best of breed process; and I can be a little bit of ‘dial up the nerd’
2969 here because this is actually my field.

2970
2971 I’ve been paying a lot of attention to deliberative processes and natural resource
2972 management over the last 15 or 20 years or so. I’m a massive nerd and I can say
2973 that with a couple of exceptions you will struggle to find anywhere in the
2974 country, regional plan material on water quality that has been developed better
2975 than that developed in the Whaitua processes.

2976
2977 The two exceptions – and basically there’s only one that’s really ended up in a
2978 regional plan, which is the Waioira Healthy Rivers Process in the Waikato; the
2979 other one is Watercare Citizens Assembly, but if I’m not wrong that hasn’t
2980 actually made it into a regional planning document yet.

2981
2982 Whaitua for all their flaws, and there were some significant flaws, but they are
2983 still best of breed and they reason why you can feel they give you a lot of
2984 democratic confidence is that again another universality worldwide in New
2985 Zealand, in the Wellington region, in the Ruamahanga, in Porirua and Te
2986 Whanganui-a-Tara, when you get a representative group of ordinary people and
2987 you put them through a really well-supported, really well-framed, really well-
2988 structured deliberative process, you provide them with all of the information
2989 support on economics, on science, on mātauranga Māori, on development
2990 economics, on public health, they show significant sophistication in making
2991 really difficult decisions in considering multiple kinds of information at once,
2992 and considering really gnarly trade-offs and arriving at really solid, really sound
2993 decisions.

2994
2995 It's better than to be honest many of our normal decision-making entities with
2996 [01.39.10] representatives – embarrassing but true.

2997
2998 The Whaitua in this region have arrived at the Whaitua Chapter’s material, those
2999 objectives and those targets, with this best of breed process. The ordinary people
3000 have been supported to bring their best selves, their collective best selves to
3001 those really hard decisions in setting a strong and clear and unequivocal direction
3002 into the future.

3003
3004 There are very times in government you can put your hand on your heart and
3005 say not only the people have spoken but the people have spoken with wisdom.
3006 It's really incredible.

3007
3008 [01.40.00] One of the saddest things about the Whaitua from my perspective is that they
3009 were very weakly promoted. That process is not well-known. It is not well-
3010 understood, because it was incredible. Flawed in many respects, yes, and it's a
3011 shame that we're not keeping on with them and doing better and better and better
3012 around the country. But, the people have spoken and they have spoken with

3013 wisdom in generating those objectives, limits and targets in the Waitua
3014 chapters.

3015
3016 Add that to the fact that Greater Wellington is on very solid ground as a
3017 governance entity, securing the life supporting capacity and restoring the life
3018 supporting capacity of water, and the fact that it is exactly that strong clear,
3019 unequivocal direction we need right now in our messy infrastructure
3020 environment, and there needs to be a very compelling reason to weaken any of
3021 that proposed material.

3022
3023 I hope you can take this into account in your decisions. Thank you for listening.

3024
3025 Chair: Thank you very much Ms Cawthorn. Your messages are very, very clear.

3026
3027 We have heard from some submitters this week that are concerned that these
3028 provisions are not properly honouring the Waitua process and the outcomes
3029 that came out of them. We are, I see, in a bit of a tricky position because yes we
3030 have got Te Mahere Wai and we've got the WIPs, but we have also since then
3031 received further information that says on the back of more refined modelling, on
3032 the back of taking in more detailed economic considerations, actually a lot of
3033 the target attribute states are better, in a better baseline and better current state
3034 than we have originally thought; and I think that that perhaps speaks a bit to your
3035 concern that there are so many TAS's that are saying "maintain" rather than
3036 "improve".

3037
3038 My question, and just perhaps drawing on your self-proclaimed nerdiness, given
3039 all of the science, and the science from the Council is now telling us actually in
3040 many places current state is better than in the notified version and so we can now
3041 support some more relaxed timeframes and even some lower TAS outcomes.

3042
3043 How do you think that we approach that?

3044
3045 Cawthorn: I suppose it's good news on one respect. It's always nice to learn that you're not
3046 as sick as you thought you were.

3047
3048 I guess if I come back to the point about the power of setting a strategic direction,
3049 and this is a direction setting document, as we go forward into the inevitable
3050 messy processes of figuring out what we're going to do with our urban
3051 environments, and I'm thinking particularly here about Porirua and the urban
3052 environments and urban activity having the most impact, particularly with
3053 sediment, I think there's still a really strong case not to weaken the direction that
3054 we're setting. I guess if the NRP is able to drive, pull or impel all the different
3055 infrastructure sector actors from whatever our water entities end up being,
3056 through to councils and developers and catchment communities and so on, to
3057 draw them in a stronger direction.

3058
3059 Erring on the side of stronger I think is good. Going so far, to say everything
3060 should be pristine, that's clearly bonkers and you're into almost paralytically
3061 impossible territory.

3062 [01.45.00]

- 3063 If there's an edge case, erring on the side of a stronger compulsion I think is
 3064 really healthy, just because a human is going to 'human' when it comes down to
 3065 it. And, an institution is going to 'institution'.
 3066
- 3067 Wratt: Just exploring that a little more and I guess the supposed fine-tuning that's been
 3068 happening into the document since it was notified; you noted that we get into
 3069 the messy part of the process and I guess I would be tempted to say that we are
 3070 probably already in the messy part of the process, which is taking the aspirations
 3071 and the WIPs and **Te Haere Mai** [Māori 01.45.51] into the Council regulatory
 3072 context. You've talked about the importance of strong strategic direction.
 3073
- 3074 I think my question is, with the refinements and in some cases a weakening of
 3075 what's in there, do you think that the strong strategic direction has been lost?
 3076
- 3077 Cawthron: I think it's been weakened, yes. I'm an optimist but I think it's safer to extrapolate
 3078 to a degree some of the bad behaviours or typical behaviours of humans and
 3079 institutions at least out a little way into the future. I think it's important not to be
 3080 naïve about how institutions will not collaborate or not cooperate, or will find
 3081 ways to make their KPIs look better. Developers for example, unless they are of
 3082 a particular breed and perhaps iwi run developers might be different, but they
 3083 are there fundamentally to make some profit off their product.
 3084
- 3085 I just think it is on principle, and I have not looked at the specific details of
 3086 individual bits because I'm sorry I haven't had the band-width, but as a general
 3087 principle again I think it's bordering on the naïve to think that general bits of
 3088 weakening are going to be something we'll thank ourselves for in the future.
 3089
- 3090 Wratt: I'm proposing this, or I'm postulating this I suppose, but one could say that what
 3091 the Council have done is set a high bar and then is starting to look at what's
 3092 achievable and working with the entities that are going to have to make this
 3093 happen, to actually set something that balances the aspirations which are in this
 3094 process.
 3095
- 3096 From my perspective, and I'm not a Wellingtonian I come from Nelson, but this
 3097 process has been an amazing process to understand some more about; but it's
 3098 that getting the balance between the aspiration and the workability. Maybe that
 3099 sounds like compromise but compromises do have to get made.
 3100
- 3101 Cawthron: How we get things done. The framing I find interesting.
 3102
- 3103 Balance: implying two ends of the scale and a trading off. If you have more of
 3104 one you have to have less of the other.
 3105
- 3106 Aspiration versus workability, aspiration versus practicality: again that's a pretty
 3107 loaded binary.
 3108
- 3109 Where there have been the most successes around the world, particularly with
 3110 things like deliberative processes which are the ones that have had the most
 3111 success, it's where there has been some kind of sense of crisis and a sense of
 3112 "Holy shit, okay, wow, we really have to do something." Sometimes that's come
 3113 from a natural disaster – earthquakes or floods, or whatever. Sometimes it's
 3114 come because there has genuinely been some kind of horrific stuff that cuts the

3115 heart of what people think their nation is about – like little kids getting
 3116 waterborne diseases or whatever. But, that sense of some kind of sense of crisis,
 3117 or some kind of intensity of compulsion is the thing that helps people break free
 3118 of what they consider currently to be affordable, to be doable, or to be workable,
 3119 which are things we generally define as adjacent.

[01.50.00]

3120 We can conceive of one or maybe two steps away from where we currently are,
 3121 but we are not good at imagining different.

3122
 3123
 3124 So, I genuinely think there is a role again as a direction setting document; not a
 3125 document that designs new institutions or stipulates new funding regimes, but
 3126 as a direction setting document the NRP can do us a service by setting that
 3127 context that makes all of the other bits go, “Woah, okay, we’re going to have to
 3128 do some stuff differently now everybody.”

3129
 3130 One of the nice examples are what you see happening out of Tairāwhiti after the
 3131 floods, in Porirua after Covid with the Citizens Assembly and the new
 3132 democratic processes that are going on there, or in Christchurch after the
 3133 earthquakes. It's those kind of almost like cataclysmic things where people go,
 3134 “Whew, okay, right, woah, we’re ready to step more than two steps adjacent
 3135 from what we currently know.”

3136
 3137 Chair: Thank you Ms Cawthron. You clearly think that we are at that point here with
 3138 freshwater. That’s very, very clear. Thank you so much. We are unfortunately
 3139 out of time. Unless a Commissioner has a burning question we might have to
 3140 unfortunately leave it there.

3141
 3142 We’ve got more hearing streams and if you would like to come back we would
 3143 very much welcome that.

3144
 3145 Kake: Just a quick comment, not a question. Just with respect to the future hearing
 3146 streams and what is presented in your submission around particular standards,
 3147 your thoughts on that might be quite useful for us to hear as we go forward.

3148 Cawthron: Thank you.

3149
 3150 Chair: Thanks so much. We wish you a good weekend.

3151 **Wellington Water**

3152 We will welcome our final submitter of the day – Wellington Water. Would you
 3153 like to come up?

3154
 3155
 3156 Kia ora. Welcome. I think you were all here when we did our introductions for
 3157 the last submitter, unless you would like us to go through that again.

3158
 3159 We’ve got a lot that we want to talk to you about obviously and we are also time
 3160 constrained. We might just cut straight to it.

3161
 3162
 3163 Viskovich: We have prepared some summaries and a couple of brief comments in response
 3164 to some of the rebuttal evidence which is currently being passed up. For those
 3165 who don’t know me on the Panel my name is Catherine Viskovich. I am the
 3166 newly appointed Head of RMA and Environment at Wellington Water.

3167
 3168 The Wellington Water team today I have Julie Alexander who will be
 3169 presenting, Steven Hutchison, Paula Hunter is our Planner and she online. Mr
 3170 Hutchison is our wastewater expert and we also have a stormwater expert Liam
 3171 Foster who should also be online. Hopefully Liam you will pop up.

3172
 3173 I think I will hand over to Ms Alexander to kick us off. I am not sure or the best
 3174 way and I'm in the Panel's hands as to how you would like to run this; whether
 3175 you would like the Wellington Water team to run through the summaries and
 3176 then to pose questions to the team, or whether you would prefer to ask questions
 3177 of each witness.

3178
 3179 Chair: I think we probably have some questions that go more to the operational issues
 3180 and then probably some specific planning related questions. One way to do it
 3181 would be to have I guess the network experts talk and then maybe if we can
 3182 cover those issues and then switch to Ms Hunter that could be a way.

3183
 3184 Viskovich: That sounds sensible. I will hand over to Ms Alexander.

3185 [01.55.00]

3186 Alexander: Kia ora. I'm starting off. I'm Julie Alexander the Chief Strategy and Planning
 3187 Officer at Wellington Water.

3188
 3189 I'm going to give you an overview of Wellington Water, who we are and what
 3190 we cover, so you can get that really important context for the rest of our
 3191 submission.

3192
 3193 Wellington Water's job is deliver safe and healthy drinking water, collect and
 3194 treat wastewater and ensure the stormwater network is well-managed. We are
 3195 owned by Wellington City Council, Hutt City Council, Upper Hutt City Council,
 3196 Porirua City Council, Greater Wellington Regional Council and South
 3197 Wairarapa District Council.

3198 These councils own their assets and they set the level of funding. They decide
 3199 how much funding to provide to Wellington Water. We then manage the
 3200 infrastructure and provide services within that funding envelope. This is all set
 3201 out for us in a management services agreement. We have our board of directors
 3202 and we are overseen by the Wellington Water Committee, which is made up of
 3203 representatives from each of the six councils. But, ultimately as a council
 3204 controlled organisation Wellington Water does not have the same power as
 3205 councils.

3206
 3207 The Wellington region faces significant challenges with aging infrastructure.
 3208 Many of the assets that we manage are near or at end of their operational lives
 3209 and the cost and effort to maintain and replace them is growing. This is a
 3210 symptom of historical under-investment and means that water assets in the
 3211 region are aging at a faster rate than they can be replaced.

3212
 3213 We are working with our councils to develop a sustainable level of renewals to
 3214 address this backlog of work, and to implement a proactive programme to
 3215 replace these aging assets.

3216
 3217 This requires a substantial increase in the rate of renewals over a period of 25
 3218 years, potentially more.

3219
3220 We estimate that at least a hundred kilometres of pipe needs to be replaced every
3221 year for the next thirty years to address the renewals backlog and meet future
3222 needs of the region. The current rate of pipe renewals is around 20kms per year.

3223
3224 Along with the renewals backlog the water infrastructure challenges faced by
3225 the region are well canvassed. These include insuring an adequate supply of
3226 drinking water over the short, medium and long term; reducing the risk of failure
3227 of critical assets in the network as well as in the treatment plants; reducing the
3228 environmental impacts of discharges from the network and from the wastewater
3229 treatment plant; and more broadly ensuring the region can grow and that this is
3230 not limited by capacity in both the networks and the treatment plants.

3231
3232 Importantly, we need to meet the expectations of mana whenua iwi and our
3233 customers.

3234
3235 One of our strategic priorities is improving environment water quality but we do
3236 need a workable regulatory framework. We need to ensure that the targets put in
3237 place are not so aspirational that they can never be met.

3238
3239 Fixing the aging infrastructure will go some way to achieving the proposed
3240 target attribute states and coastal water objectives; however, as signalled in the
3241 technical evidence of Mr Foster and Mr Hutchison additional investment will be
3242 required to achieve environmental improvements over and above the renewals
3243 programme.

3244
3245 The scale of investment required informs what can feasibly be achieved and
3246 therefore the workability of the regulatory framework that Plan Change 1 seeks
3247 to put in place.

3248 In terms of our position for Hearing Stream 2, as we advised in Hearing Stream
3249 1, we are not actively pursuing the relief sought regarding timeframes for
3250 achieving the proposed TAS or CWO. This was on the basis that Wellington
3251 Water considers that these are essentially valued judgements or political choices
3252 that would be more appropriately addressed by Wellington Water's councils,
3253 who ultimately decide the affordability for their communities.

[02.00.12]

3254
3255 Our evidence is based on the practical workability challenges associated with
3256 achieving the proposed TAS and CWO.

3257
3258 Although we are not seeking changes to the timeframe associated with the TAS
3259 and CWO, we are seeking amendments to the plan provisions proposed in
3260 Change 1 to provide for appropriate recognition of stormwater and wastewater
3261 discharges and to enable these activities.

3262
3263 Wellington Water applied for global discharge consents in mid-2023 from the
3264 wastewater networks and stormwater networks across the Wellington, Porirua,
3265 Upper Hutt and Lower Hutt areas.

3266
3267 The proposed approach in the consent applications was to undertake
3268 improvements sub-catchment by sub-catchment, as network improvements
3269 cannot be made all at once.

3270

3271 The global consent applications were lodged before Change 1 was publicly
3272 notified and therefore did not consider the amended provisions. We are now
3273 reviewing the consent strategy in light of that.

3274
3275 I thought it would be helpful to give you some context around the uncertainty of
3276 the environment for the delivery of water services for us and across the region.

3277
3278 Proposed changes include: the implementation of the government's local water
3279 done well; policy settings which are aimed at improving New Zealand's water
3280 challenges, and this will impact how water services are funded and delivered;
3281 the Resource Management Act system reform; the revision of national direction,
3282 particularly in those signalled with the National Policy Statement for Freshwater
3283 Management; and Taumata Arowai the water services regulator is currently
3284 consulting on a proposed set of wastewater environmental performance
3285 standards.

3286
3287 You will be aware that currently our councils are consulting with their
3288 communities on future arrangements for new water companies and respective
3289 water services delivery plans are due to the Department of Internal Affairs in
3290 September 2025.

3291
3292 It will be the new water companies, rather than Wellington Water, that will be
3293 responsible for undertaking activities that will contribute to achieving the TAS
3294 and the CWO.

3295
3296 Lastly, I need to respond to the rebuttal evidence of Mr James Blyth.

3297
3298 I agree with Mr Blyth that there is no readily available tool at Wellington
3299 Water's discretion to assess stormwater loading and receiving environment
3300 concentrations around Plan Change 1 in respect of the TAS.

3301
3302 In response to Mr Blyth's further comments that Wellington Water has had
3303 sufficient time to develop its own tool, I disagree.

3304
3305 For Wellington Water to develop its own tool Wellington Water modelling staff
3306 requested approval to use the Regional Council's recent contaminant models in
3307 order to align the base assumptions.

3308
3309 Wellington Water staff have sought approval and confirmation of assumptions
3310 from Regional Council officers on several occasions over the last few years to
3311 no response.

3312
3313 So whilst Wellington Water has in theory had sufficient time to develop its own
3314 model the lack of approval has not allowed Wellington Water to proceed as far
3315 as we would have liked.

3316
3317 The only exception where approval was given is or one sub-catchment, the Black
3318 Creek containment model that Wellington Water built as a pilot study to assess
3319 the methodology set out in the 2023 consent applications. This has been
3320 correctly pointed out by Mr Blyth.

3321

3322 Wellington Water would welcome working more closely and collaboratively
 3323 with the Regional Council so that we proceed with the development of a model
 3324 which aligns to the greater Wellington work for the metropolitan area.
 3325

3326 Thank you.

3327
 3328 Chair: Thanks very much. I think we'll hear from Mr Foster and then we'll come back
 3329 and ask questions.
 3330

3331 Thank you for the talking points. Feel free if you would like to even do a bit of
 3332 a summary. I am just conscious of time. Over to you. I think we would probably
 3333 like to have at least fifteen minutes on the planning side. Thank you.
 3334

3335 Foster: Thanks very much. Kia ora koutou. Ko Liam Foster tōku ingoa.
 3336

3337 I will leave I suppose the first six or seven bullet points that I identify with the
 3338 evidence and I suppose I will just concentrate on the ones that come after that
 3339 point really.

3340 [02.05.05]

3341 If I start with number eight, I would like to identify the ability to meet the TAS
 3342 attributes through and at the end of network solutions require appropriate
 3343 stormwater discharge consents in place; and the scale of planning design works
 3344 and funding required to support these is of a significant scale that requires the
 3345 service delivery providers like Wellington Water to shift their approaches to
 3346 delivery.
 3347

3348 Given how Wellington Water is funded, as Ms Alexander has identified and
 3349 network investments are only carried out.
 3350

3351 It is my opinion that if there is no ability to control the source of contaminants
 3352 recognised as being difficult, time consuming and expensive, then Wellington
 3353 Water will be required to address these improvements at a discharge point.
 3354

3355 The current practices and techniques available require land to be set aside for
 3356 the function of treatment are equally costly and time-consuming to deliver, and
 3357 the effectiveness of these devices to reduce the dissolved contaminant state
 3358 means there is the potential to not achieve the TAS requirements within the
 3359 timeframes as currently proposed. The rebuttal evidence of Ms Ira agrees with
 3360 this.
 3361

3362 I agree that improvements can be made with these compromises in place. I would
 3363 like to note that these may result in either driving more innovation into this
 3364 space, or result in greater numbers of or larger assets to be put in place to support
 3365 the reduced efficiencies all in heavily urbanised areas already.
 3366

3367 This has a likely impact on cost and time to deliver and the confidence that the
 3368 investment will support the network operator to achieve the target attribute states
 3369 within the time periods identified.
 3370

3371 The evidence of Mr Norman appears to be in agreement with this. The fact that
 3372 there are some differences in relation to the opinion of the scale of investment
 3373 required is natural at this stage, as there is little clarity about what interventions

3374 are required where in the urban environment and how these can be consented to
 3375 be implemented, and as such certain assumptions have had to be made to support
 3376 increasing our awareness of the scale of the challenge that could be ahead.
 3377

3378 I noted in my evidence that Wellington Water does not currently have access to
 3379 the data or analytical tools required to assess the correlation between
 3380 contaminated load out of the pipe and contaminated concentrations within the
 3381 receiving environment.
 3382

3383 The evidence of Mr Blyth agrees with this point when considering analytical
 3384 tools, but Mr Blyth identifies there to be appropriate levels of data to help inform
 3385 tool development.
 3386

3387 I do agree with Mr Blyth to this end and his point that Wellington Water may
 3388 not have had the information on discharge quality at every pipe. As such, I agree
 3389 with Mr Blyth's call for a pragmatic modelling application with robust
 3390 monitoring being put in place to track changes and improvements over time.
 3391

3392 I draw attention to the experiences and approach that Christchurch City Council
 3393 followed to support their comprehensive stormwater network discharge consent
 3394 and its stated aim of improving water quality.
 3395

3396 As Ms Alexander stated, Wellington Water do not hold the appropriate powers
 3397 to enforce contaminating land use or activities to implement improvements
 3398 when these parties are unwilling or unwilling to act. Again, the experiences from
 3399 operation of the Christchurch City Council's comprehensive stormwater
 3400 discharge consent point to this, requiring additional bylaws to be written and
 3401 agreements to be made between the consent holder and the regulatory authority.
 3402

3403 Finally, even with the necessary ongoing investment and resources being
 3404 available to deliver that necessary infrastructure by the stated timelines for each
 3405 catchment, the outcomes are not certain to be achieved.
 3406

3407 I am of the opinion that good practice stormwater management devices will
 3408 deliver an enhancement to the quality of the current stormwater discharges, but
 3409 I am unable to state that they will satisfactorily achieve the TAS for zinc and
 3410 copper in a dissolved state.
 3411

3412 Force control remains our best option for avoiding or minimising the generation
 3413 of these contaminants requiring catchment wide integrated management of
 3414 stormwater quality.
 3415

3416 Kia ora koutou.
 3417

3418 Chair: Thank you very much. That was very clear. We will pass onto the final Mr
 3419 Hutchison, thank you.
 3420

3421 Hutchison: The public wastewater network and the private pipes that connect to that public
 3422 network are a significant contributor to the E.coli contamination to freshwater
 3423 and enterococci in the urban coastal environment due to the condition and
 3424 performance both in wet weather and dry weather.
 3425

[02.10.05]

3426 The proportionate contribution of the wastewater network to the contamination
3427 each location is not to our understanding well-known and in my view will need
3428 further work to clarify.

3429
3430 As Ms Alexander referred to, the proposed standards will require a major
3431 uplifted investigation, repair, renewal and upgrade work to meet. While we have
3432 undertaken studies, particularly on reducing wet weather overflows, in general I
3433 am unable to quantify the degree of the work required to achieve these standards
3434 because the standards are well-beyond what we have experience or knowledge
3435 of.

3436
3437 The evidence from Mr Walkers appears to a reasonable estimate of the scale, but
3438 I do not that there are significant uncertainties.

3439
3440 With regard to rebuttal with Dr Greer's evidence, first of all the load reductions
3441 in Table 1 are helpful, noting the uncertainty there. The urban rural load
3442 estimates in Table 4 of Dr Greer's rebuttal are also helpful, noting that the
3443 commensurate issue still has to be worked on.

3444
3445 I do have some remaining concerns about the assumptions in the Table about the
3446 urban E.coli relating solely to the wastewater network; in particular, as a
3447 practitioner we understand other contaminant sources are present – avium is a
3448 notable source which hasn't been well understood and doesn't really appear to
3449 be acknowledged in the work to date – and that again relates to the
3450 commensurate issue.

3451
3452 With reference to s28 in Dr Greer's I do have remaining concerns about the
3453 understanding of the 95 percentile loads. First of all the monitoring and reporting
3454 of wet-weather overflows is not generally all that well managed. Water services
3455 authority Taumata Arowai are currently consulting on a standard to improve that
3456 visibility and consistency of reporting, but from my perspective there are some
3457 overflows in our network which are up to twenty times a year and quite a few
3458 are ten times a year; so it's more than the acknowledgement in the rebuttal
3459 evidence.

3460
3461 Obviously the wet weather overflows vary across the FMUs, across the region,
3462 but the principle remains unclear to me that if dry weather load has been the
3463 main source then logically in wet weather those concentrations would decrease,
3464 because the relative loading is the other way. We clearly see an increase in wet
3465 weather E.coli concentrations compared to dry weather – a significant increase.
3466 So it's really around the source of that and it gets beyond my expertise as a
3467 wastewater engineer to entirely understand this – whether it's a resuspension of
3468 E.coli, which I have some doubts about in terms of E.coli is from warm guts
3469 basically and so it doesn't survive well in a cold environment under UV. Hence
3470 the reason for my assumption in my evidence that the 95 percentile loads are
3471 primarily due to those wet weather overflows.

3472
3473 We can talk to this further in future hearing streams.

3474
3475 Chair: Thank you very much. Questions about operational issues – who would like to
3476 start?

3477

- 3478 Wratt: Kia ora. Thank you for that succinct summary of Wellington Water's role and
3479 concerns.
3480
- 3481 One question to start the ball rolling. To what extent have you looked at your
3482 planned work within the funding level you currently have and how much that
3483 would deliver on the target attribute states that are in PC1. I guess I would say
3484 in the notified version and/or the rebuttal version?
3485
- 3486 Hutchison: To a limited extent. I have noted in s12 of my evidence what our current funding
3487 allowance was in the long-term plan, \$268m for wastewater. We've got one
3488 specific intervention there which is building a big storage tank in Porirua, which
3489 will be a significant reduction in those wet weather overflow loads; otherwise,
3490 first of all we haven't got specific projects clearly defined for the remainder of
3491 that funding and then we don't have a dollars per E.coli understanding of how
3492 much it would achieve in terms of meeting those states.
3493 [02.15.25]
3494 It is worth noting that our long-term funding applications to councils was
3495 premised on a 2060 date and the 2040 dates came in subsequent to that.
3496
- 3497 Wratt: The follow-up question really is, you've identified that your approach has been
3498 on a catchment by catchment basis, I think. If you were now to go back and look
3499 at it, where are the 'big bang for the bucks' essentially? Where would we
3500 prioritise to get the best return in terms of delivering on the targets in PC1.
3501
- 3502 Hutchison: I guess the 'best bang for buck' would be looking at those contaminant load
3503 sources and just focusing on those, and trying to work up an understanding of
3504 getting them down quickly but not necessarily all the way. So with work weather
3505 overflows, interventions like that Porirua storage tank get a point reduction;
3506 otherwise it really varies. In our experience our drainage investigation crews will
3507 sometimes quickly locate a source and sometimes it's a needle in a haystack and
3508 they'll fix a pipe or something and it turns out it's not directly connecting to the
3509 stormwater in urban streams and they have to keep hunting. It varies.
3510
- 3511 Wratt: So that's not a process that you've done yet. I guess perhaps an associated
3512 question is through the WIP process my understanding is you weren't
3513 represented on the WIPs as members, but you had opportunity to engage with
3514 the WIP committees. Perhaps I guess the question from that is, would that not
3515 have provided an indicator for you that maybe some of that work needed to start
3516 being done?
3517
- 3518 Hutchison: We certainly contributed to the WIP process. In terms of starting work we have
3519 work that's underway. It's probably a question of the quantum of work. We have
3520 these drainage investigation crews I've been talking about who work on meeting
3521 the current standards.
3522
- 3523 Alexander: When we provided advice to our counsels for the long-term plans we requested
3524 \$7.6B worth of investment, based on what we are ramping up our deliver to
3525 achieve a broad range of outcomes including improving environmental water
3526 quality. Council has funded us around just over half of that. It's a challenge. We
3527 have to prioritise within those budgets. That's high level.
3528

- 3529 Viskovich: Can I just add as well? My understanding is that the network discharge consent
 3530 applications included the premise was that yes we would make improvements
 3531 sub-catchment by sub-catchment. That's sort of been the basis on which
 3532 Wellington Water had previously been working. Those consent applications
 3533 were lodged pre the notification of Change 1, and so we are now very much
 3534 looking at the applications, figuring out if they are fit for purpose and
 3535 determining what if a future application or retooling could be, as you say
 3536 Commissioner, to try and deliver 'best bang for buck' so that we're achieving
 3537 the greatest gains across the Wellington region.
 3538
- 3539 Chair: Just a follow-up to that. So the sub-catchment by sub-catchment approach,
 3540 because I was wondering how amongst all of your five Council clients...
 3541
- 3542 Alexander: Six.
 3543
- 3544 Chair: Six. Sorry, within this PC1. Because hypothetically if someone came along and
 3545 said, "Actually we can make available a lot more funding that we had
 3546 anticipated, but actually the need for improvement was lower for that particular
 3547 council compared to another.
 3548
- 3549 With this new retooling that you're talking about, would that allow you to
 3550 reprioritise workforce and efforts into the areas where the improvements are
 3551 needed more?
 3552 [02.20.10]
- 3553 Alexander: Under our current arrangement, which is obviously as Wellington Water, that is
 3554 what we would do. We would be able to identify where we would want to focus
 3555 and request funding from the Council, and then we would deliver accordingly in
 3556 that part of the region. We would have time to scale up to do that.
 3557
- 3558 Viskovich: But, we couldn't move... so for example, if one city provides us with funding
 3559 but the greater need is in a different city, we can't move the funding from one
 3560 area to the other – just to make sure that's clear under the current arrangement.
 3561
- 3562 Chair: But, that might change. We don't know yet, but it might change.
 3563
- 3564 That really comes to the point, I think you were here for the previous submitter
 3565 who was talking about the importance of having the NRP providing that really
 3566 clear strategic direction on what is needed and where.
 3567
- 3568 We've heard the officers talk about how the TAS role is a state of the
 3569 environment monitoring tool, but will having the TAS really help you with that
 3570 prioritisation and provide that greater strategic direction, and would we see that
 3571 then following through into the funding, into the long-term plans?
 3572
- 3573 Hutchison: The prioritisation will help. I guess previously in our applications the approach
 3574 had been to engage and work out the prioritisation, because deciding one
 3575 catchment over another is a difficult thing for us to do. So yes, that will help.
 3576
- 3577 In terms of funding there is a bit of a lead time in terms of the funding cycle in
 3578 local government which is three year long-term plans and having to prepare the
 3579 information about twelve months before that process starts – which that process
 3580 will change to an undetermined process.

- 3581
3582 Kake: Thank you for setting out the summaries, that was incredibly helpful. The
3583 context around the complexity of working across multiple local authorities is no
3584 easy fete. I am not sure if you had the opportunity to hear yesterday the mana
3585 whenua submissions that came through. It was made very clear in understanding
3586 now the arrangement, I suppose for lack of a better word, with respect to the
3587 organisation of Wellington Water and the funding streams.
3588
3589 The comments that were made from mana whenua that E.coli is probably the
3590 most offensive contaminant into the freshwater bodies that essentially end up in
3591 the coastal area that are their mahinga kai.
3592
3593 Just looking at figure in your primary evidence Mr Hutchison there are a raft of
3594 pump stations in the upper catchment of Te Awa Kairangi that then flow through
3595 to Lower Hutt and then into the wastewater treatment plant at Seaview. I suppose
3596 just flagging that we heard very strongly from Taranaki Whānui that that
3597 particular site has essentially resulted in generations of their whānau not being
3598 able to consume, swim, practice their tikanga in these waterbodies. Do you have
3599 a response to that?
3600
3601 Hutchison: I guess the context would be that the goal of wastewater collection and
3602 conveyance disposal systems has been historically focused on public health
3603 protecting the community from cholera, typhoid and so on. As the time has
3604 evolved the environmental concerns and cultural concerns have become more of
3605 a consideration. It's really an evolution of the priorities that's expected from the
3606 infrastructure that serves the community.
3607 [02.25.00]
3608 All I can say is, we can apologise for the standards of the past.
3609
3610 Kake: We also heard from Ngāti Toa about the collective responsibility of agencies
3611 and we hear about the investment going into Porirua and the new treatment plant
3612 there to deal with the overflows. I suppose it's all up in the air at the moment
3613 with respect to what's happening through reform, but I suppose the intent behind
3614 the collectiveness demonstrated by agencies in Porirua I would hope would be
3615 demonstrated in the other catchment of Te Whanganui-a-Tara.
3616
3617 Alexander: As I said before, we are governed by the Water Committee which has
3618 representatives from each council, usually the mayors. The water committee has
3619 given us five strategic priorities of which one is improvement environmental
3620 water quality. We have that intent and that commitment. We do the work that
3621 we do. We have people in the company that are so passionate about this
3622 themselves, but of course we act within the arrangements that we've got and
3623 how the organisation is set up.
3624
3625 Kake: One final question around that funding and the prioritisation and acknowledging
3626 that you are reliant on that rate base from these local territorial authorities. If
3627 they highlight where some of the priorities are required I'm assuming
3628 Wellington Water responds and prioritises those as well based on their
3629 aspirations or community aspirations. Let's just say the 'tickle' in the stream.
3630
3631 Alexander: Yes that is important. We are a council controlled organisation. Ultimately we
3632 are beholden to them and the ratepayers and communities.

- 3633
3634 Viskovich: Could I just add to this discussion that in the net word ‘discharge consent
3635 applications’ some of the prioritisation was always intended to be undertaken in
3636 collaboration with mana whenua. There was a collaborative committee with
3637 mana whenua that was intended to be set up and that would drive where
3638 investment was going to go and which sub-catchments would be looked at, at
3639 which times and so on.
3640
3641 I think just to also add to this discussion, since I’ve been at Wellington Water I
3642 have been quite impressed with the extent of collaboration and consultation that
3643 Wellington Water undertakes with mana whenua. We have partnership
3644 agreements with Taranaki Whānui and Ngāti Toa. We are in frequent
3645 conversations with them, but of course we are dealing in a funding constraint
3646 environment as well.
3647
- 3648 Kake: Just a quick one on that then, so through the review of the consent, the network
3649 discharge consent, you’re continuing with that collaboration through the
3650 reassessment I suppose of the notified Plan Change?
3651
- 3652 Viskovich: Yes. It's not to revisit. The purpose of looking at the consent applications is not
3653 to revisit that approach; it is to make sure that the applications are fit for purpose
3654 given the change in the regulatory environment.
3655
- 3656 McGarry: I am interested in you saying it's difficult in deciding what sub-catchment to
3657 work on. I understand there’s a lot of competing issues. Have you looked at the
3658 evidence of Dr Greer, which very much suggests that in terms of driving and
3659 achieving a TAS that it's actually the dry weather flows, the leaks and cross-
3660 connections and things, that will actually have the biggest ‘bang for buck’.
3661
3662 I am really interested in what you’re actually doing now in terms of prioritising
3663 those kind of areas and whether the information that’s come through this process
3664 will now enable you to put a bit more science and a bit more priority based
3665 around driving those TAS down.
3666
- 3667 Hutchison: I would say we haven’t been idle. We’ve been working under a stormwater
3668 consent to get contamination below the 1000 E.coli limits and we have a dozens
3669 of monitoring points beyond what the TAS covers – back further up the pipe so
3670 to speak, up the streams.
3671 [02.30.05]
3672 We’ve had a drainage investigation crew for the last three or four years, which
3673 I have outlined some of their work in terms of interventions and efforts to
3674 maintain that standard.
3675
3676 When I was referring to the prioritisation being helpful, I guess I was referring
3677 to the approach that we outlined in our proposed consent application to work
3678 with mana whenua to decide which areas to focus on, because it's not just about
3679 the E.coli loads it's about the values as well.
3680
- 3681 Wratt: A slightly different question and I think it's one for Mr Foster. I’m looking at
3682 Appendix 1 to your statement Mr Foster which has some tables with information
3683 on current states. I am just curious as to where that current state information has
3684 come from, because we have had quite a bit of conversation about we’ve got

3685 baseline states and that was the starting point for the WIPs I think, and certainly
 3686 for PC1. Then there has been discussion around, “Okay we’ve now got some of
 3687 our current states are actually better than what was the baseline state.”
 3688

3689 I guess, where do those current states come from and they have made their
 3690 way... is Greater Wellington Regional Council and the work being done for PC1
 3691 picked up on that information that’s in your tables?
 3692

3693 Foster: I suppose I can’t really speak to how Greater Wellington are utilising the
 3694 information I provided. The source of the material has been prepared and my
 3695 understanding is based on some of the more initial target attribute state settings
 3696 of the time. Probably around about the February to March period of time was
 3697 when the work was re-undertaken by supporting organisations that have helped
 3698 to produce this information, and which I have been relying on for that role.
 3699

3700 I think it's on the resubmitted version of about March when we submitted our
 3701 original submissions, and not the notified version; but I can confirm with you
 3702 once I’ve had a chance, after the meeting.
 3703

3704 Wratt: I think that would be useful thank you, because it's quite a lot of information
 3705 there. There’s a table on sub-catchments, current states, TAS and required load
 3706 reductions. Thank you.
 3707

3708 Foster: We’ll come back to you on that one.
 3709

3710 Chair: Maybe one more before we move to Ms Hunter. This might really be something
 3711 that’s more for Hearing Stream 4 but I’m interested in your views on the
 3712 commensurate load reduction point.
 3713

3714 This does actually come into some of these objectives – if achieving a TAS or a
 3715 coastal objective requires hypothetically a 20 percent load reduction. The entity
 3716 could be NZTA, could be yourselves. Is required to demonstrate a
 3717 commensurate reduction.
 3718

3719 From an operational perspective – and I take your point Mr Hutchison about
 3720 how you’ve got limited control about the sources of the contaminants – but what
 3721 operations operationally are there at the end of pipe point? We have talked a
 3722 little bit about retrofitting and urban settings. We heard from NZTA a couple of
 3723 days ago and I’m paraphrasing, but they said, “There’s not really too much we
 3724 can do about the brake pads in cars.” Zinc and copper.
 3725

3726 Practically what options are there at the end of pipe discharge point to achieve
 3727 contaminant load reductions?
 3728

[02.35.00]

3729 Foster: I suppose will start the source. There’s still some activity that could be
 3730 undertaken across the roading network that has a potential beneficial impact in
 3731 terms of reducing the amount of contaminants that enter into the pipe network
 3732 and that’s through for example street sweeping on a more regular frequency, but
 3733 I can’t necessarily comment as to what the impacts of that might have on terms
 3734 of operational budgets of councils or NZTA. But, certainly that will help some
 3735 of the dry deposition of material and the sediment load that’s sitting on the
 3736 pavement waiting for the next rainstorm to push it down into the pipe network.

3737 That would certainly help with that ability to restrict some of the material
3738 coming into the pipes or the urban stream settings.

3739
3740 When it comes to the bottom end of the network we're talking about I suppose
3741 retrofitting either large open space areas such as wetlands, pulling out and
3742 putting into proprietary devices which might include things like filtration
3743 devices, bio-retention, features on the landscape which can be integrated as nice
3744 parts of the urban street scape, but do come at a cost in terms of the land available
3745 for whatever the purpose is that the land is currently used for.

3746
3747 A range really and certainly when it comes down to trying to achieve benefit for
3748 the dissolved state, the longer can have a filtration and bio retention in contact
3749 with that water the better.

3750
3751 Chair: Thank you very much. Mr Foster (Hutchison), do you have any comments from
3752 the wastewater perspective?

3753
3754 Hutchison: E.coli end of pipe is not practicable to the best of my knowledge. Ultraviolet
3755 disinfection is the technique that we would use at a treatment plant, but that
3756 would be extremely hard. I investigated it once in my career and it would be
3757 very, very hard and quite impracticable at the end of a pipe to put these
3758 ultraviolet lights to try and break up the E.coli.

3759
3760 There are a handful of places in New Zealand which have done it. There are one
3761 or two in Whangarei that I have heard of where they've got a storage tank and
3762 then ultraviolet disinfection at the end. There would be a handful of examples in
3763 the country and there's many thousands of pipes just in Wellington.

3764
3765 Chair: Thank you so much. We do hope we'll see the technical experts again for future
3766 hearing streams because it is really, really helpful getting your perspective.
3767 Thank you. I think we should spend the remainder of our time with Ms Hunter
3768 looking at the planning provisions, unless there's anything else that you feel you
3769 would like to cover that we haven't already.

3770
3771 So the planning provisions, Ms Hunter, did you want to take us through a
3772 summary, just the remaining points of difference between you and the reporting
3773 officer? Are you happy just to take questions?

3774
3775 Hunter: I thought that I would just start off with I was involved with the preparation of
3776 the resource consent applications for the wastewater network overflows. Just to
3777 provide some context, the approach that was taken historically was to consent
3778 individual overflows. I think there were about seven or eight consents for just
3779 individual overflows within the Hutt City area.

3780
3781 The other overflows in the Wellington metropolitan area are currently not
3782 consented. It's not like you're re-consenting global consents for these overflows.
3783 This is the first step that has been taken to do a comprehensive metropolitan area
3784 by consents for these.

3785
3786 There were real challenges with the current plan in terms of finding a viable
3787 consenting pathway for these to actually be consented. That's why there's been

- 3788 this pause and Plan Change 1 is attempting to address and provide a viable
 3789 consenting pathway for these applications.
- 3790 [02.40.10]
 3791 I just want to make the point also that these discharges happen whether they've
 3792 got consents or not. These aren't discretionary discharges. They happen in the
 3793 network and that's just the reality of the situation. They will continue to happen
 3794 in the network. You can't eliminate these. They need to be regulated and there
 3795 needs to be a workable consenting pathway in order to do this.
 3796
- 3797 In my talking points I have responded to the rebuttal evidence of Ms O'Callahan.
 3798 If you're happy I could just step you through those points there.
 3799
- 3800 Chair: Just while we are getting the paperwork sorted, Ms Hunter in the operative plan
 3801 and I'm just trying to make sure I understand, there's Rule 52 which is the
 3802 stormwater from a local authority and there's activity classifications here
 3803 ranging from control to RD, and sorry I haven't come across it, but if there not
 3804 an equivalent for wastewater?
 3805
- 3806 Hunter: What has happened is there's a series of rules that apply to the wastewater
 3807 network overflows and they've got various classifications, one of which is non-
 3808 complying activity. When you bundle those various rules and things and you do
 3809 that bundling exercise the whole application becomes a non-complying activity.
 3810 Then there are a series of objectives and policies are avoid policies; so it's rather
 3811 hard to find a way through the policies to say that you're not contrary to them
 3812 when you've got avoid policies. Then of course there's the effect side of things,
 3813 and I really struggled in terms particularly in terms of mana whenua and the
 3814 policies that relate to that, to say that you're less than minor effects. So that's
 3815 why the pathway is very difficult to obtain consents.
 3816
- 3817 These applications they only relate to wet-weather overflows. We didn't apply
 3818 for dry weather because we just thought that was even harder to consent those
 3819 as well.
 3820
- 3821 Chair: Thank you. So there are existing regulations but just haven't sought the consents
 3822 is what I've understood from that.
 3823
- 3824 Hunter: Yes it's a real challenge under the operative plan for these applications to be
 3825 granted. It's been very helpful of Greater Wellington to promulgate Plan Change
 3826 1 and use I suppose the framework of the applications to try and imbed that into
 3827 the plan change, to help create a pathway through.
 3828
- 3829 Chair: Thank you. I think we've all got your talking points now. Going through the
 3830 rebuttal would be great.
 3831
- 3832 Hunter: Yes, so I have just got a list there and I will just go over the key ones.
 3833 [02.45.00]
 3834 The first one is around the lack of information around baseline. I do
 3835 acknowledge that Ms O'Callahan and the technical experts have proposed a
 3836 number of amendments to the target attribute state tables and I do apologise, but
 3837 we will address those in detail when we get to Hearing Stream 4. We are just not
 3838 in a position to be helpful for you in terms of understanding the implications of

3839 the amendments that have been made to date, to those tables. That will definitely
3840 be addressing that in Hearing Stream 4.

3841
3842 I will just move onto number 3. This is about the retention of an objective in the
3843 operative plan, to bring that through into Plan Change 1. I suppose my point
3844 there is that I think there really needs to be an anchor with that objective which
3845 sets the framework from which the policies and the rules ought to support the
3846 policies and the rules relating to stormwater and wastewater networks.
3847 Wellington Water has requested some amendment to that and those amendments
3848 are set out in 8.10 of my evidence. So I can continue to see the need to have let's
3849 say an anchor in the objectives for the provisions that flow on from that relating
3850 to wastewater network overflows and stormwater discharges.

3851
3852 Then I also continue to see the need in those objectives, number 6 in my response
3853 to the rebuttal, with those objectives listed there too include reference to public
3854 health, rather than just seeing that public health is like a sub-set of social. I think
3855 given the critical importance of public health that should be referenced in those
3856 objectives.

3857
3858 Then the final point I just want to make, and I do support in principle Ms
3859 O'Callahan's proposal to set out the inclusion of provisions around prioritisation
3860 of improvements and that will be really helpful in terms of the consenting
3861 context.

3862
3863 I suppose the position, and we will comment on this further in Hearing Stream
3864 4, because I think this needs also to be seen of the context of other policies that
3865 set prioritisation as well. I think there's potentially competing provisions around
3866 prioritisation that will address those in Hearing Stream 4.

3867
3868 Chair: Thank you very much. Are you still of the view that the amendments Ms
3869 O'Callahan supports to Objective WH.O2(i) which is bringing that third tier of
3870 te mana o te wai into the provision, do you think that doesn't talk specifically to
3871 Wellington Waters' needs; and so Objective 6 needs to be retained for these two
3872 Whaitua.

3873
3874 Hunter: Yes I do. As I say in my rebuttal, I think they could be made Whaitua specific if
3875 Ms O'Callahan's concern around the scope and so forth. I can draft up and
3876 provide that for Hearing Stream 4, more Whaitua specific objectives relating to
3877 that, rather than just relying on leaving Objective 6 where it is. I can bring that
3878 into the Whaitua sections. I think that would be helpful.

3879
3880 Chair: Yes, thank you. Any questions for Ms Hunter?

3881 [02.50.00]
3882 Kake: Just a comment I suppose. I suspect this will come out again through the next
3883 Hearing Stream 4 on this topic, but the topic with respect to the prioritisation
3884 policies the note that you've made at the bottom of your last page with respect
3885 to the schedules, I would really encourage Wellington Water to think about those
3886 scheduled sites, those mahinga kai areas, those Māori customary areas that we
3887 heard very strongly about from mana whenua yesterday that have been discussed
3888 through the WIPs, through Ta Mahere Wai and just understand I suppose the
3889 generational trauma that they've been through with respect to these pump

3890 stations being put in their back yard. I will leave it at that and wait until the next
3891 one.

3892
3893 Thank you.
3894 Hunter: If I can just comment on that. It has been mentioned by the other witnesses, but
3895 in the waste [02.51.24 consents there is this collaborative committee that has
3896 been proposed through consent conditions, which is equal representatives from
3897 the consent holder and from mana whenua. That was proposed as a decision-
3898 making committee and not just a recommendation committee. It was very much
3899 front of mind that these schedules would come into play significantly in
3900 determining a prioritisation of how at the moment that is set up through the sub-
3901 catchments, but I think there's some rethinking around how this is spatially let's
3902 say administered in a consent process, because the thinking has moved on a little
3903 bit in terms of the practicalities of the sub-catchments and the sub-catchments
3904 don't necessarily in all cases align with the part FMUs.

3905
3906 So there's some complexity I suppose around how this is spatially distributed in
3907 a consent process.

3908
3909 Chair: Thank you very much Ms Hunter, yes that additional information will be really
3910 useful going into Hearing Stream 4. Thank you. I think those were all the
3911 questions we had on your planning evidence.

3912
3913 There was something else I wanted to ask and this might be a question for Ms
3914 Alexander. Mr Walker's comments regarding the workforce capacity constraints
3915 – given we know that these changes are going to be happening and more is likely
3916 to be required, can you talk at all about lead-in times and just levers for getting
3917 more people who are available to do the actual work.

3918
3919 Alexander: Of course there's quite a bit to it, depending on the skillset you're looking for.
3920 Mr Hutchison could probably comment more around engineering skillsets and
3921 where we are at with those.

3922
3923 Generally, certainly a few years ago when we were looking at this as a company
3924 and trying to grow the workforce we were looking at you need to know how
3925 much funding you're going to get so you can make that investment. You need
3926 to have a wrap around building the skills that you're going to need. Then you
3927 need people who are on the tools to be able to guide and show new people as
3928 they come in.

3929 [02.55.00]

3930 It's an endeavour that needs investment and commitment. Wellington Water has
3931 never been in that position because we've always been caught in various waiting
3932 for reform; but certainly you would expect a future water company to be able to
3933 make that investment and look at growing the skillset longer term.

3934
3935 Hutchison: I guess with the engineering angles there's an element of market. At the moment,
3936 the construction market economy is down, so there's more engineers and
3937 contractors available. But, beyond that it's really that certainty of workload
3938 which drives contractors to invest in plant and firms to retain engineers and so
3939 on.

3940

3941 Chair: Thank you. And, yes, the certainty of funding that goes with that. We are
3942 probably at time. I see this as a good starting point for the discussions. We look
3943 forward to talking with you more. Also just acknowledging the huge amount of
3944 change that's going on for you all. It could perhaps seem that it's quite easy for
3945 other people to be always pointing the finger at Wellington Water, but certainly
3946 just in the submissions we've heard so far there is very much an
3947 acknowledgement that it is a collaborative effort that is needed by all parties to
3948 achieve improved water quality for the region. I haven't seen too much at all of
3949 everyone saying that this is all Wellington Water's responsibility. Your
3950 messages I think are being heard and we acknowledge the scale of the problem.

3951
3952 Thank you very much. That probably brings us to an end for this week. Thanks
3953 again very much to everyone who has participated – all our submitters, Ms
3954 O'Callahan, the Council team, Mr Ruddock. It's been I think a very interesting
3955 week full of information that is going to be really helpful for us as we deliberate
3956 on these provisions.

3957
3958 With that we will end with a karakia. Thank you Mr Ruddock.

3959
3960 Ruddock: Unuhia, unuhia
3961 Unuhia ki te uru tapu nui
3962 Kia wātea, kia māmā, te ngākau, te tinana, te wairua i te ara takatā
3963 Koia rā e Rongo, whakairia ake ki runga
3964 Kia tina! TINA! Hui e! TĀIKI E!

3965
3966
3967

[End of Part 3 recording – 02.57.59]