

NRP PC1 – HS3 Day 2

Greater Wellington Regional Council

HEARING STREAM 3

Day 2

Rural Land Use, Forestry and Vegetation Clearance, and Earthworks Version 4

Date: Tuesday 27th of May 2025

Hearing Stream: Three

Venue: Greater Wellington Regional Council Chambers
100 Cuba Street, Te Aro, Wellington

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

[NRP PC1 – HS3 Day 2 – Part 1]

[Begins 00.55.05]

- 1 Chair: Mōrena everyone. Welcome to day two of Hearing Stream 3. We'll start with a
2 karakia.
3
- 4 Ruddock: *Tukua te wairua kia rere ki ngā taumata*
5 *Hai ārahi i ā tātou mahi*
6 *Me tā tātou whai i ngā tikanga a rātou mā*
7 *Kia mau kia ita*
8 *Kia kore ai e ngaro*
9 *Kia pupuri*
10 *KIa whakamaua*
11 *Kia tina! TINA! Hui e! TĀIKI E!*
12
- 13 Chair: Kia ora. Thank you Mr Ruddock.
14
- 15 My name is Dhilum Nightingale. I am chairing the Freshwater Panel and Part 1
16 Schedule 1 Panel. I am a Barrister and I live in Te Whanganui-a-Tara. We will
17 just introduce the rest of the Panel and then for those who weren't here
18 yesterday and tuning in online we will also do some introductions of the
19 Council officers and other staff in the room. Thank you.

- 20
 21 McGarry: Kia ora koutou. My name is Sharon McGarry. I'm an Independent
 22 Commissioner based out of Ōtautahi, Christchurch.
 23
- 24 Kake: Ata mārīe. I'm Puawai Kake, Planner and Independent Commissioner from
 25 Northland. Kia ora.
 26
- 27 Wratt: Kia ora, morena. I'm Gilliam Wratt, Independent Commissioner based out of
 28 Whakatū Nelson.
 29
- 30 Stevenson: Mōrena. Ngā mihi nui kia koutou. I'm Sarah Stevenson, an Independent Planner
 31 and Commissioner based here in Te Whanganui-a-Tara, Wellington.
 32
- 33 Ruddock: Tēnā koutou katoa. Ko Josh tōku ingoa. Hearing Advisor for Great Wellington.
 34
- 35 Nation: Kia ora, morena. I'm Tom Nation. I'm a Director and Spatial Analyst at
 36 Collaborations based here in Wellington.
 37
- 38 Blyth: Kia ora koutou. Ko James Blyth tōku ingoa. Also a Director at Collaborations
 39 and a Water Scientist based in Lower Hutt.
 40
- 41 Greer: I'm Michael Greer, the Technical Lead for the PC1 process.
 42
- 43 Vivian: Mōrena. Alisha Vivian. I'm the Reporting Officer for the earthworks topic and
 44 a Policy Advisor here at Greater Wellington.
 45
- 46 Watson: Mōrena I'm Shannon Watson. I'm a Consultant Planner from GHD and I am the
 47 Reporting Officer for the forestry and vegetation clearance topic.
 48
- 49 Pepperell: Mōrena. Josh Pepperell representing Greater Wellington Regional Council
 50 providing technical evidence on compliance.
 51
- 52 Reardon: Kia ora. My name is Kevin Reardon. I'm a Director at Form Consulting Group
 53 providing technical evidence on behalf of GW.
 54
- 55 Peryer: Kia ora. Jamie Peryer. I'm a Senior Environment Restoration Advisor for
 56 Greater Wellington providing technical evidence on rural land use issues.
 57
- 58 Willis: Mōrena. Gerard Willis, Consultant Planner and Reporting Officer on rural
 59 [58.23]. Thank you.
 60
- 61 Anderson: Kia ora tatou. Kerry Anderson, Legal Counsel for Greater Wellington.
 62
- 63 Chair: Thank you everyone. Mr Ruddock, did you want to go through some health and
 64 safety.
 65
- 66 Ruddock: Thank you Commissioner.
 67
- 68 For those who weren't here yesterday, in case of a fire, if a fire alarm sounds
 69 please head towards the exit located behind the Commissioners' seats. Do not
 70 re-enter the building until the all-clear is given by staff. If you require any
 71 assistance in the evacuation please come directly to me.

72
73 In the case of an earthquake drop, cover and hold. Do not evacuate unless
74 instructed to do so. Wait for the shaking to stop and then follow the instructions
75 of the Hearing Advisor or the safety wardens.

76
77 For those speaking today, please ensure that you are muted when not speaking.
78 Your microphone will flash green when it is on but not in use. It will turn red to
79 indicate that it is on and live. Only three microphones can be live at a time.

80
81 All speakers should introduce their name before each instance of speaking for
82 transcription purposes. For those joining online you will have your camera and
83 microphone locked to mute. These will be unlocked for you nearing your
84 scheduled time slot.

85
86 The Hearing Advisor, myself, will ring a bell to indicate certain time points. One
87 ring indicates that there is ten minutes left, two rings indicates that the
88 submitter's time-slot has ended, though the Panel may choose to continue asking
89 questions past the two rings if suitable.

90
91 Thank you.

92
93 Chair: Thank you. Does anyone want to raise any procedural issues or anything before
94 we get underway?

95 [01.00.05]

96 Alright, well in that case we welcome Mr Watson. Thank you very much for
97 your report. I understand you will be presenting to us issue by issue with support
98 from the relevant technical experts as needed. We will hand over to you. I think
99 we go through until the morning break at 10.30am. Thank you.

100
101 Watson: I'm Shannon Watson. I'm a Consultant Planner at GHD. I wasn't involved in
102 developing the provisions for PC1, however I was involved in a couple of places
103 throughout the development of PC1 in terms of summarising submissions for
104 Council on behalf of GHD.

105
106 I guess to start off with, a couple of apologies to the Panel and submitters – this
107 is my first foray into plan making or policy at this sort of scale. It's been a really
108 challenging topic. I apologise if my analysis or recommendations throughout
109 this process are not as polished as some might usually be accustomed to.

110
111 I guess another couple of important apologies: updates to evidence – Josh on my
112 behalf circulated some updated amendments to Appendix 2 of my rebuttal
113 evidence this morning. There is some pretty material updates in that set of
114 documents. Firstly, some embarrassing drafting errors. WH.R20 and P.R19
115 apply where TAS are not met. Hopefully that was clear enough through the
116 explanation of the rebuttal evidence, even though it wasn't clear through the
117 drafting of the provisions themselves. I usually pride myself on attention to
118 detail. No-one is more horrified than I am at the state of the provisions in
119 Appendix 2 as they were published. Apologies to the Panel and submitters who
120 quite rightfully may have been very confused as to what they were trying to
121 understand.
122

123 The second quite important amendment was removal of the link to the RPS
124 change definition of “highly erodible land” in the potential erosion risk land
125 definition. That was a last minute addition during the rebuttal process based on
126 Mr Nation and Mr Blyth’s rebuttal evidence.

127
128 I understand that the mapping layer which kind of links to that definition is no
129 longer publically available – it's kind of been pulled down. James or Tom can
130 talk more to that later if needed. That means that from an implementation
131 perspective people not being able to access that mapping layer is really
132 challenging. So, I recommend that inclusion be deleted. If the highly erodible
133 land definition needs to be added into PC1 that will have to be through a plan
134 change at a later date.

135
136 Some minor amendments to M.44 to reflect changes in terminology made to
137 Schedule 27 and changes to Schedule 27 to better reflect the intent. I think there
138 was some kind of version control issues with that one, because that was an
139 absolute disaster. There’s no change to intent as drafted, it's just kind of a tidy-
140 up thankfully.

141 [01.05.00]

142 I’ve been made aware by counsel that date of NES should be 2017 not 2023 –
143 so I have made those amendments throughout and likewise for some reason there
144 were still references to plantation forestry in the definitions and that should be
145 commercial forestry.

146
147 I have highlighted all the amendments that I have made, so it's clear what has
148 changed from what came out in rebuttal.

149
150 The only other thing is probably at the minor end of the scale the hyphen in
151 “exotic continuous cover forestry” was not in the same place everywhere, so I
152 have tidied that up as well.

153
154 I still want to draw attention to the supplementary evidence from Mr Reardon –
155 that’s kind of largely factual updates to figures and scale of forestry expected in
156 these whaitua over the next five years, and that’s occurred in the previous five
157 years. I have reviewed this evidence and it doesn’t change any of the conclusions
158 or opinions in my evidence.

159
160 I will move into context for this topic.

161
162 There were 607 submissions and 727 further submissions received; 149
163 submissions and 211 further submissions received on the vegetation clearance
164 provisions – that’s Rules WH.R17 to WH.R19 and P.R16 to P.R18.

165
166 In Schedule 33 – 64 submissions, 76 further submissions on the definitions; 35
167 submissions and 40 further submissions on the highest erosion risk land mapping
168 - although there are many more general submissions that comment on the
169 erosion risk mapping approach. Then there was also 273 submissions and further
170 submissions in general opposition to the forestry provisions in PC1. Those were
171 submissions that opposed the general approach to forestry but weren’t linked to
172 any specific rule, policy or schedule.
173

174 The key issues coming out of submissions were alignment of PC1 with national
 175 direction. This is as you would have heard a number of times over the past
 176 hearing streams and yesterday, the stringency test, relevant to what you're going
 177 to hear today.

178
 179 The robustness of evidence: again that comes back to the stringency test, but
 180 also the efficacy and effectiveness of the operative NRP vegetation clearance
 181 rules. The methodology for the identification and classification of highest
 182 erosion risk land and the alignment of PC1 with what the community was
 183 expecting through WIP recommendations.

184
 185 Alongside me today I've got my technical team. In terms of talking to the overall
 186 approach and impacts of provisions on ability or not to meet TAS Dr Michael
 187 Greer is going to be talking to that. There's a couple of observational pieces of
 188 evidence in terms of how things are operating on the ground in these whaitua
 189 prepared by Mr Reardon and Mr Josh Pepperell for Council. Mr Tom Nation is
 190 going to talk to the erosion risk mapping and limitations. A lot of this was
 191 covered yesterday so I'm not sure if there's going to be a lot more to add to that.
 192 Obviously the application is a little bit different today. And, Mr James Blyth
 193 who is going to be talking about certain loads from forestry and potential
 194 unintended consequences if you're going to be preventing or creating forestry
 195 on some pieces of land.

196
 197 Chair: Sorry Mr Watson to interrupt. Thank you very much for tabling these revised
 198 provisions. The way you have identified the changes is very clear, so thank you
 199 for that.

200
 201 Can I just check Mr Ruddock, are these now online? Great.

202
 203 So when we are looking out the provisions we'll refer to this 26 May version.
 204 Acknowledge there were errors – these things happen. We had picked up that
 205 wording and in that Rule 20 should have “does not meet”. That was very clear
 206 in the evidence. But, thank you very much for tabling this.

207 [01.10.00]

208 Can I just check? One that jumped out at me Mr Watson, the definition of
 209 indigenous forest, I think that definition is also in the commercial forestry
 210 regulation. Is there a particular reason why that should be the plantation forestry?
 211 Watson: No. I don't know how I've missed that, sorry.

212
 213 Chair: That's alright. These things happen. That's fine. We'll just record that as a
 214 commercial forestry Regs.

215
 216 Watson: Any definition is pulled from the National Standards and should refer to
 217 commercial forestry – for clarity, if I've missed any others.

218 Chair: You also mentioned the mapping and I know we will come to that and hear from
 219 the experts as well. Yesterday I mentioned that it wasn't completely clear in my
 220 head how that was working in its relationship with the erosion mapping that we
 221 looked at yesterday as well as the schedule. So, while I do acknowledge we did
 222 discuss it yesterday, it would be good to go through that with a bit of care to
 223 make sure we all do follow.

224
 225 Was there anything else anyone wanted to ask on these revised provisions?

226
227 We're probably okay so thank you.

228
229 Watson: I guess we'll turn to the first issue which is categorisation of provisions. In short
230 there's no changes to allocation of provisions recommended. R104 and R106
231 refer to the coastal marine area as they're drafted in the NRP at the moment. I
232 guess there was mixed views from those around me as to whether or not that
233 reference means the categorisation needs to change, so I have taken an **abouts**
234 **and braces**, [01.12.11] or the most conservative approach and the path of least
235 resistance I guess in light of submissions and recommend that these provisions
236 be re-categorised to P1S1.

237
238 That's the only change to the provisions.

239
240 Wratt: Sorry, can you just say again which provisions that was?

241
242 Watson: R104 and R106, in terms of the not applicable applied to a linkage.

243
244 I will just summarise the vegetation clearance provisions as they were notified.

245
246 Permitted activity rules WH.R17 and P.R16 allowed vegetation clearance on
247 highest erosion risk land, woody vegetation. As permitted if it was associated
248 with erosion risk treatment as part of a farm plan or pest plant control and debris
249 was not placed where it could enter a surface waterbody. If the vegetation
250 clearance activity was not one of those and exceeded 200 metres consent was
251 required as a controlled activity under rules WH.R18 and P.R17 if an Erosion
252 Sediment Management Plan had been prepared and submitted in support of the
253 consent application. If those rules weren't met consent was a discretionary
254 activity.

255
256 Schedule 33 required an Erosion Sediment Management Plan specifically for
257 vegetation clearance activities. Then there is some mapping – highest erosion
258 risk land, woody vegetation mapping, which was linked to the vegetation
259 clearance rules as notified.

260
261 In terms of submissions there was some support for vegetation clearance
262 provisions in PC1 as notified – Forest & Bird, EDS and Taranaki Whānui in
263 particular were quite supportive. But, largely submitters were opposed to the
264 vegetation clearance provisions as notified.

265
266 Key things thought by submitters were carve-outs for specific activities,
267 opposition due to the mapping accuracy and the methodology for classifying
268 erosion risk; the restrictiveness of the thresholds for vegetation clearance; and a
269 lack of clarity around what was and what wasn't pest plants; and the information
270 requirements of Schedule 33 being too prescriptive – in particular the
271 management objectives contained within that schedule being unrealistic in terms
272 of seemingly driving a return to natural state, which was touched on yesterday.

273 [01.15.00]

274 Issue 2 in my s42A Report there is nothing substantive here. A lot of it was
275 already covered in other hearing streams.

276

277 Transpower requested a reference to the [01.15.21] at the start of the chapter.
 278 Ms O’Callaghan addressed this in Hearing Stream 1. Some explanatory text was
 279 recommended to be added to the side of the plan change. I supported that
 280 recommendation.

281
 282 Submissions from Woodridge seeking the rules in the respective whitua
 283 chapters be duplicated. Again Ms O’Callaghan addressed this in Hearing Stream
 284 1 in the sense that it doesn’t make sense for the rules to be combined because
 285 the objectives in their whitua are different.

286
 287 The other thing is that Ms O’Callaghan through Hearing Stream 2 recommended
 288 deletion of WH.P2 and PP2, which was the only policy direction for vegetation
 289 clearance in PC1 itself. However Policy P107 which relates to vegetation
 290 clearance of the NRP is not recommended to be dis-applied to these whitua; so
 291 there is no real policy gap created. It could be cleaner to rewrite Policy P107
 292 into PC1, so all the provisions are in one place, but I haven’t gone there at this
 293 stage.

294
 295 Chair: Mr Watson, are you happy to take questions on these provisions as we’re going
 296 through?

297
 298 Watson: Sure.

299
 300 Chair: If it's okay to just slow down a little bit just so we can keep up.

301
 302 I have a question on Rule 17. WH.R17, can you just talk me through. I am not
 303 sure I completely get the difference between these definitions.

304
 305 Erosion prone land – in Rule 17 I think erosion prone land should be in bold
 306 text, or a heading, because that’s relying on the definition in the operative plan
 307 where the pre-existing slope is 20 degrees.

308
 309 My first question is a drafting one. In that rule and in Rule 18, you’ve got the
 310 use of land and the associated discharge of sediment. Is there a reason why you
 311 prefer that wording as opposed to saying “vegetation clearance in the associated
 312 discharge of sediment”? Is there a reason for referring to use of land?

313
 314 Watson: I guess the fundamental change to R17 and P.R16 that’s important to understand
 315 is I’ve basically rewritten the operative NRP rules into those rules, on the basis
 316 that there was no evidence base for the vegetation clearance rules as they were
 317 notified in PC1. The wording that’s reflected in that rule will be what’s come
 318 through from the operative NRP as it stands. It will be an alignment issue
 319 between what’s in the NRP.

320
 321 Chair: Thank you. One of the standards that you’ve permitted – that the clearance is
 322 permitted if it's implementing an action in the Erosion Risk Treatment Plan. So
 323 this links through to where actions have been identified in a Farm Environment
 324 Plan?

325
 326 Watson: Correct.

327 [01.20.00]

- 328 Chair: But, that area of land has to be on a pre-existing slope that exceeds 20 degrees,
329 is that right, or is it anywhere where the Farm Environment Plan has identified
330 that an Erosion Risk Treatment Plan is required?
331
- 332 Watson: As drafted it would be only on erosion prone land.
333
- 334 Chair: That's not mapped. What we have mapped in Maps 90 and 93 are potential
335 erosion risk land, which are the steeper slopes?
336
- 337 Watson: Correct.
338
- 339 Chair: So that includes pasture, woody vegetation and forestry.
340
- 341 Watson: The erosion prone land definition from the NRP is not mapped, so it relies only
342 on the definition and from a compliance perspective I guess if you're on site you
343 make an assessment as to whether or not the pre-existing slope is 20 degrees. So
344 given the uncertainty with the mapping and the evidence base for vegetation
345 clearance, as I provided in PC1, I have just replicated the existing framework of
346 the NRP through PC1.
347
- 348 Chair: Yes, that was my question – just whether it was clear when you were on erosion
349 prone land, but as you say it's taken from the NRP.
350
- 351 Watson: Correct. It might be a question as to whether or not that farm management plan
352 vegetation clearance activity needs to be broader than just where it meets erosion
353 prone land to align with Mr Willis. I haven't thought about that until your
354 question to be honest – that potential overlap.
355
- 356 Chair: I think I need to have a quick look at Schedule 36. Just bear with me. I was just
357 seeing if there was anything specific. There's the Erosion Risk Treatment Plan
358 in E which we did look at yesterday.
359
- 360 Watson: The erosion prone land definition from the NRP will be broader than the
361 mapping in PC1. That's kind of the conflict that I hadn't appreciated until your
362 question. That's probably something that I need to look at a bit further. I don't
363 think it's necessarily a major, but it's just tidying up.
364
- 365 Chair: Yes. Presumably if your land is on one of those maps it will also be erosion
366 prone land. It's just that additional requirements might apply to you if your land
367 is potential erosion risk land.
- 368 Watson: I guess the difference is the mapping for PC1 my understanding is it's based on
369 a slope of 26 degrees. The mapping in PC1 is based on the highest erosion risk
370 land for those land uses where they are greater than 26 degrees. The definition
371 in the NRP is 20 degrees, so there would be land not identified on the PC1
372 erosion risk mapping recognised through Mr Willis' provisions that would then
373 be subject to vegetation clearance rules potentially. It's just needing to work
374 through that issue.
375
- 376 I see where you are coming from.
377
- 378 Chair: Thank you very much. Mr Willis is nodding. Is there anything you want to add
379 to that Mr Willis, or you are just in agreement with what Mr Watson said?

380 [01.25.00]

381 Willis: There's two things going on. Obviously there's the erosion treatment
382 requirements which apply to the mapped area over 26 degrees as Mr Watson just
383 said; but then there's separately the earthwork and vegetation clearance rules
384 which apply on the 20 degree slope. That would apply on a lower slope area, so
385 a bigger area I suppose.

386
387 As I would understand it, the vegetation clearance rules will apply both over the
388 mapped area on potentially erosion prone land, but also a broader area, if that
389 makes sense.

390
391 McGarry: I'm just wondering in terms of this vegetation clearance rule. I know you have
392 taken it from the NRP. There is no setback so you could clear vegetation right
393 up to a waterbody?

394
395 Watson: I think there is a setback in the revised rules, WH.R17 and P.R16. In clause 3 at
396 the bottom, vegetation clearance shall not occur within five metres of a surface
397 waterbody.

398
399 Wratt: You have the vegetation clearance does not exceed a total of two hectares per
400 property per twelve month period. Has that per hectares been brought through
401 from the operative plan?

402
403 Watson: Correct.

404
405 Wratt: Because I notice in the original version of Rule 18 it was a 200 metre square per
406 property in any consecutive twelve month period. That's now been crossed out
407 and I just wonder what... but I guess if it's just carried through from the operative
408 NRP.

409
410 Watson: Yes, it's come from Rule R104 of the permitted activity rules of the NRP.

411
412 Wratt: Thank you.

413
414 McGarry: With that five metres one of the reasons to not rely on the NES-CF is the
415 inadequacy of that five metre setback from waterways. I'm just wondering why
416 that's still the same as the NES standard on erosion prone land. I understand
417 you've taken it from the NRP but whether or not that's something that should
418 be looked at. It could be seen as duplication but the evidence says it's not
419 sufficient in all circumstances.

420
421 Watson: The vegetation clearance rules in PC1 are separate from vegetation clearance in
422 the forestry context, so it's not duplication in terms of the NES-CF. It's got no
423 relationship to the NES-CF.

424
425 McGarry: Understood but the evidence says five metres as a setback for planting is not
426 sufficient in erosion areas. I am just wondering why vegetation clearance is only
427 five metres and not a greater setback.

428
429 Watson: I'm not entirely sure how to answer that other than the rules are pulled through
430 from the NRP and that's how they were drafted in the NRP. It can be looked at.
431 I saw submissions from I think it was Forest & Bird and EDS requesting a ten

- 432 metre setback, which I did consider but in terms of consistency I agreed with the
 433 recommendation of Ms Vivian in terms of the setback that she applied for
 434 earthworks. Otherwise, you'd be in a situation where you would have a more
 435 stringent setback for vegetation clearance than you would for earthworks which
 436 seems a little bit counterproductive.
- 437 [01.30.00]
 438 Stevenson: Thank you Mr Watson. On the same tack as Commissioner McGarry I am
 439 interested in the evidence behind some of these s.42A recommendations. It's my
 440 understanding that neither Dr Greer nor Mr Blyth could tie in a quantitative
 441 sense sediment loss to vegetation clearance, or at least not in a significant way;
 442 so that leaves me to wonder how those permitted activity thresholds were
 443 determined – 200 square metres and what the evidence was to inform those
 444 thresholds?
- 445
 446 Watson: I can't answer that question. I wasn't involved in the development of PC1. The
 447 author of those provisions refused to engage with the PC1 process so I didn't get
 448 a lot of information out of him on vegetation clearance, forestry provisions, or
 449 their original intent or the machinations behind them unfortunately. I was
 450 operating in an information void.
- 451
 452 Stevenson: Dr Greer, is there anything you could possibly add? I realise the planning
 453 approach is not your purview it's the technical.
- 454
 455 Greer: I was involved in a lot of discussion during provision drafting – though not this
 456 one. As far as I know that number was drawn I wouldn't say arbitrarily but it
 457 was purely at the discretion of the drafter who made that call.
- 458
 459 Stevenson: Thank you.
- 460
 461 A related question: I understand Dr Greer advised caution that vegetation
 462 clearance thresholds aren't supported by direct science but rather they're driven
 463 by an equity principle. I can almost anticipate the answer will be similar to your
 464 previous one, but how does that advice gel with the s.42A recommendation
 465 around those thresholds?
- 466
 467 It's okay to say the same as last time.
- 468 Watson: Sorry, can you clarify the question around what do you mean about the s.42A
 469 threshold? Are you talking about the two hectares?
- 470
 471 Stevenson: Totally. My first question was about the proposed permitted activity thresholds,
 472 200 square metres. The question was are they appropriately evidence informed.
 473 I didn't get an answer to that, but now I'm asking if there is any other link
 474 between Dr Greer's evidence and these vegetation clearance thresholds? Or, is
 475 it an equity concern that is driving these thresholds that was suggested in Dr
 476 Greer's evidence?
- 477
 478 Watson: If you're talking about the two hectares that are now referenced in the rules in
 479 terms of vegetation clearance threshold, that was on the basis that there is no
 480 evidence to justify any change so you kind of stick with what you've got, which
 481 is the threshold that's prescribed in the NRP at the moment. That's the rationale
 482 for that. Evidence base for that two hectares I couldn't talk to either because I
 483 wasn't involved in the NRP process.

484
485 Stevenson: Thank you.
486
487 Watson: Was there any other questions?
488
489 This builds on what Commissioner McGarry and Commissioner Stevenson were
490 just asking in terms of the evidence base. I think I have sort of covered that.
491
492 One of the WIPs considered vegetation clearance as part of the WIP process.
493 That was based on the NRP rules as they were drafted in 2015 from memory.
494 That was the Porirua WIP. They determined that the vegetation clearance rules
495 were appropriate for managing that activity. Vegetation clearance wasn't
496 specifically assessed through the Te Whanganui-a-Tara whitua process.
497
498 I guess the second big information gap we are working in is that Council has no
499 real understanding of the scale of vegetation clearance being undertaken in these
500 whitua.
501 [01.35.05]
502 Forestry is a little bit different. You will see in management plans there's enough
503 of an understanding of where and what's happening.
504
505 Vegetation clearance is a little bit different. It also overlaps quite significantly
506 with earthworks. As outlined in the evidence of Dr Greer there is no
507 understanding of the influence of activities on the TAS in these whitua as a
508 result.
509
510 Turning to Schedule 33 which was a requirement of the controlled activity rule
511 as notified, in my view the effects that Council are trying to manage through the
512 vegetation clearance rules and that schedule are better covered by other
513 provisions in PC1 such as the earthworks provisions. That's on the basis that in
514 my view vegetation clearance doesn't include the disturbance of soil for stump
515 removal and extraction, in which case the effects of vegetation clearance that
516 you're dealing with are potential surficial erosion due to loss of canopy cover
517 and potential increase erosion over time as the roots and things start to decay.
518 None of those activities were specifically referenced in Schedule 33. Earthwork
519 activities are better managed through earthwork rules and the Erosion Sediment
520 Management Plan requirements for that activity.
521
522 I guess probably most importantly, which I have touched on, is that there is no
523 evidence that the existing NRP rules won't achieve TAS. In my view there's no
524 need to replace them at this time – wouldn't be able to meet the s.32 tests. I
525 started down the track of coming up with some revised limits that might be
526 appropriate which better aligned with earthworks and things, but just kind of
527 getting to the s.32 tests at the end of the day there's no way to justify them.
528 Anything that would be done in that space would be token or arbitrary, on the
529 basis that it's more than what's in the NRP at the moment and therefore it could
530 be said to get you closer to meeting TAS.
531
532 I guess we've spoken about these. I'm happy to answer any kind of other
533 questions, but I think they've all been covered – other than maybe the pest plants
534 clarification and the circumstances where the clearance limits are restricted from

535 where they were as notified – being linked to when there’s an authority kind of
536 issue to biodiversity, agent or council to prevent a biodiversity risk.

537
538 Chair: I think it was Winstones that raised this point about the definition of erosion
539 prone land in the operative plan is not a freshwater provision – it applies in the
540 coast as well. They say as a consequence these rules, 17, 18 and the equivalent
541 in Porirua, should be identified as Part 1 Schedule 1 provisions.

542
543 I am not sure if you’ve addressed that in your rebuttal.
544 Watson: My understanding as to the categorisation of provisions is that it applies as they
545 were notified. Erosion prone land wasn’t in those rules as notified. It was the
546 highest erosion risk land, woody vegetation definition which was designed with
547 PC1 in mind I guess, on the basis of minimising certain impacts of water
548 qualities to meet TAS.

549 [01.40.00]
550 Chair: Sure, but then if the s.42 recommended wording is now incorporating definition
551 of erosion prone land, does that mean... so maybe the short question is, does
552 Rule 17 for instance apply also in coastal areas? So, discharges of sediment into
553 the coast.

554
555 This is something that you could address in your reply.
556
557 I think one other issue that came through in submissions, I think NZTA had
558 framed it as conjunctive versus disjunctive issue – vegetation clearance
559 associated with repair and maintenance of existing roads and cracks; or as
560 opposed to and.

561
562 I think you do cover this in your rebuttal, but you think that, as I understand it,
563 just practically it's not going to be read as requiring all elements of that definition
564 to be achieved.

565
566 Is there any risk in granting that relief just so it's very clear it is disjunctive?
567

568 Watson: The vegetation clearance definition referred to is in the NRP, so it's out of scope
569 for me to make changes or recommend changes to that definition. I’m not sure
570 if it's within your scope to make consequential changes as you see fit to the
571 operative NRP.

572
573 Chair: I think that they were seeing that that change somehow come through in Rule
574 17. I understand the point.

575
576 Sorry, one very final one on definitions. Rule 18 refers to renewable energy
577 generation. I think the defined term in the NRP is renewable energy generation
578 activities. Why I think that potentially matters is because it might assist with
579 some of the relief I think Transpower had sought.

580
581 I don’t think there’s a definition of renewal energy generation. I think it's
582 renewable energy generation activities which also then picks up connections to
583 the grid.

584
585 Watson: I’ll just be a minute.
586

- 587 Chair: Sure. Again you can come back in the reply on that point.
588
- 589 Watson: I think I've pulled those rules straight from the NRP so that's how they're drafted
590 in the NRP. So if there's a disconnect there it's existing. I will double-check that.
591 From memory I haven't touched those rules, other than dragging and dropping
592 them into PC1.
- 593 Chair: Thanks. Mr Watson, the two square metre issue that Commissioner Stevenson
594 had raised, could you just briefly take me through again. So that's in your s.42A,
595 you're recommending that comes out and it be replaced with a permitted activity
596 standard of two hectares. In the slide you've got up here, you say that the
597 evidence base doesn't support limiting clearance as a permitted activity to only
598 200 square metres.
599
- 600 I do appreciate you have covered this, but could you just explain the two
601 hectares? Has that come through in submitter relief? Where has that come from?
602
- 603 Watson: A number of submitters requested that the operative NRP rules for vegetation
604 clearance be retained. That is ultimately what I have done through my
605 recommendations. I have combined PC1 WH.R17 and P.R16 as notified with
606 the permitted activity rules in the NRP, such that their application doesn't
607 change. But, they are one kind of essentially permitted activity rule which
608 covered all of the activities which would have been permitted as notified under
609 both PC1 and the operative NRP.
- 610 [01.45.00]
611 Does that make sense?
612
- 613 Kake: Just quickly to check if I may. With respect to what you just mentioned there,
614 WH.R17 the numerical three reference there to vegetation clearance in the rules
615 that you've referenced are 122, 125, 126 so on and so forth. Those are essentially
616 the permitted activity rules that have been pulled through from the NRP into this
617 particular clause?
- 618 Watson: No. Those rules listed in clause three are the beds, lakes and rivers rules. That
619 clause talks about why vegetation clearance five metres might be appropriate in
620 those situations, because they're beds, lakes and river activities. The rules pulled
621 through from the NRP into PC1 are R.104 and R.105 in terms of the permitted
622 activity rules. Then R.106 and R.107 for the restricted discretionary and
623 discretionary activities respectively.
624
- 625 Kake: Just double-checking then. So, R.29 under the NRP just because it references
626 the structures that are site identified in Schedule C, which is the mana whenua
627 ones that's been pulled through. Sorry, I haven't got that far down just yet.
628 Because it's an RDA.
629
- 630 Watson: It would only be those rules that are specifically referenced in the existing NRP
631 permitted activity rules that are pulled through. Again I haven't tweaked the
632 material or the scope of those rules. I have just dropped them into PC1 on the
633 basis that there's no evidence that they aren't effective and therefore no reason
634 to change them as they stand at the moment.
635
- 636 McGarry: Mr Watson, forgive us if we seem to be a computer that you keep having to
637 punch the information into repetitively, but Rule WH.R18, again you've just
638 dropped that straight in from the NRP, correct?

639
640 Watson: Correct.
641 McGarry: Ms Anderson, I wonder if you could reply and respond to us. I look at this rule
642 and I think it's only recognising renewable energy which is obviously the NPS-
643 REG but then I think about the NES-ET and then I think about RSI. I just think
644 that the obligations of this Panel to not just take the provision and plop it in, but
645 we also need to give effect to these other NPSs. I see what this trying to achieve,
646 but it's only achieving it for one small part.
647
648 I just wonder if you could respond to us on our ability to give effect to those
649 other NPSs, rather than just merely popping something in because it's in the
650 current plan. I am not sure that gives us the ability to give effect to the higher
651 order.
652
653 Anderson: Thank you. Yes I can do.
654
655 Chair: Thank you Ms Anderson. Yes, if there is some restriction based on scope or at
656 least whether that definition could be renewable energy generation activities
657 which is broader as a defined term in the NRP, than renewable energy
658 generation, which I think is a mistake. I don't think there's a definition of
659 renewable energy generation in the plan.
660
661 Stevenson: I have been sitting with this for a while. The wording in the national direction is
662 very specific around renewable electricity generation – so this is a national
663 policy statement for renewable electricity generation, and NES for electricity
664 transmission etc.
665 [01.50.05]
666 Why the wording “energy generation”? Perhaps a question for legal counsel as
667 well. Is there a difference?
668 Watson: Again it's just pulled from the NRP so it's a hangover from whatever is in the
669 NRP. Obviously the national direction has changed in the terminology used in
670 the RPS and some of these other higher order documents has changed since then.
671
672 McGarry: I guess the question is a bit broader Ms Anderson too for the RPS. We've also
673 got an updated RPS now. Same thing there is how do we actually give effect to
674 those documents if we are just taking what's been...
675
676 Chair: Thanks Mr Watson. I think we've made the point. Continue. We might be up to
677 Issue 4.
678
679 Watson: We've kind of covered this in discussion. I'm happy to take more questions or
680 we can move on. I don't think there is anything there that we haven't already
681 covered.
682
683 Are you happy for me to move on?
684
685 Thank you. I will now turn to the forestry provisions. I will just provide a bit of
686 introduction and some context.
687
688 There 177 submissions, 257 further submissions on the specific forestry
689 provisions, so that's WH.P28 and P26 which are policies; rules WH.R20 to

690 WH.R22 and P.R19 to P.R21, and Schedule 34 which was the Erosion Sediment
691 Management Plan for forestry activities.

692
693 Again there was some support for PC1 as notified from EDS, Forest & Bird and
694 Taranaki Whānau, but the general tenure of submissions was one of what I could
695 describe as strong opposition. There was quite polarising views on this topic, as
696 you can imagine. It's quite an emotive one at the moment given recent weather
697 events in the Central North Island.

698
699 On one side the forestry sector and land owners are kind of saying the provisions
700 go too far and it's an unreasonable restriction on the use of their land; and on the
701 other, the likes of EDS, Forest & Bird and mana whenua have considered the
702 provisions don't go far enough.

703
704 I guess the main concerns coming through with submissions obviously were the
705 stringency test and the robustness of evidence or rules which go beyond the
706 regulations of the NES; the implications of the erosion risk mapping
707 methodology; financial implications of forced retirement, or forced re-
708 vegetation on highest erosion risk land and potential are quite significant cost
709 implications under the ETS; and general lack of investment certainty and
710 attractiveness as an investment activity for landowners and potential flow-on
711 effects in terms of climate change. You could end up with activities happening
712 on land that are worse for the environment than forestry in terms of emission
713 generating activities.

714
715 I guess kind of key and sort of outside of the scope of PC1 but a really important
716 context, is that the forestry provisions go beyond the WIP recommendations
717 which sought a very focused and non-regulatory approach – given I guess the
718 recency of the NES at the time that the WIPs were being considered. PC1
719 provisions go well beyond those recommendations and it came as a bit of a shock
720 to the forestry sector.

721 [01.55.35]

722 I've got a slide up here summarising the NES. I don't know if you want me to
723 go through it. I can probably assume that you guys understand enough about the
724 NES.

725
726 I guess the forestry provisions in PC1 as notified. I will just summarise them at
727 a high level so it's in front of everyone's mind what they cover. Policies WH.P28
728 and P26 they have three criteria to them I guess. One was to identify highest
729 erosion risk land to plantation forestry; the second was to require an Erosion
730 Sediment Plan for all forestry activities; and the third and probably the most
731 controversial or definitely the most controversial was to prevent establishment
732 of new plantation forestry and continuation of existing plantation forestry post
733 current harvest cycle. That's important as it provides the policy direction for the
734 prohibited activity rules, which I will talk to a bit later.

735
736 The rules WH.R20 and P.R19 in essence all of the listed forestry activities that
737 were occurring in PC1 whaitua required at a minimum controlled activity
738 consent. To be considered a controlled activity a number conditions needed to
739 be met and this included a discharge limit which aligned with that for the
740 earthworks rules, requirement for an Erosion Sediment Management Plan to be

741 certified to submission and prepared in accordance with Schedule 34, and also
742 the visual clarity TAS for any relevant catchment had to be met.

743
744 The other thing that wasn't really an issue raised by submitters as such was that
745 there was also another controlled activity condition which required to be a
746 controlled activity that the land couldn't be in pasture prior to being afforested
747 I'm assuming.

748
749 If controlled activity conditions couldn't be met consent was required as a
750 discretionary activity. Then the rules WH.R22 and P.R20 were the prohibited
751 activity rules. They prevented afforestation earthworks and mechanical land
752 preparation on highest erosion risk land.

753
754 Another thing that's important to note here is there was a drafting issue and
755 replanting was intended to be included in that rule, which essentially would have
756 meant that any kind of harvest post the latest or the most harvest cycle would
757 also have been prohibited, because you wouldn't have been able to replant.

758
759 Then Schedule 34 required an Erosion Sediment Management Plan for forestry
760 and that needed to be prepared and certified by a registered forestry advisor. The
761 intent of that schedule was to give Greater Wellington the ability to withhold
762 consents until management plans were of an appropriate standard. Schedule 34
763 also included some quite prescriptive management objectives, which were
764 strongly opposed through submissions.

765
766 Then there's the Maps 92 and 95 which identify what areas of land currently in
767 plantation forestry were subject to prohibition or prevention of any further
768 forestry.

769
770 I guess Issue 7 from my s.42 Report deals with the scope of PC1 forestry
771 provisions.

772 [02.00.00]

773 The key one I think in this space is the lack of alignment between PC1 and the
774 NES-CF. Section 32 recognised that the NES-CF was kind of impending, but it
775 didn't incorporate any of the anticipated requirements of the NES-CF, so this is
776 important in the context of permanent or carbon forestry, or exotic continuous
777 cover forestry as it's kind of defined in the NES.

778
779 Following submitter evidence from NZCF and discussions with counsel we
780 agree that some of those activities are outside the scope of PC1 as notified. I will
781 talk to that a bit more shortly.

782
783 I touched on this briefly as well but there as an omission of replanting as an
784 activity. Replanting was supposed to be included as an activity in all of the
785 forestry provisions. It was missed during drafting. Counsel submitted basically
786 saying it was an omission and they needed to be added back in. Vegetation as
787 an activity was also missed from Rule P.R29.

788
789 The omission of replanting, as I mentioned, was quite significant because it
790 basically resulted in prevention of any kind of further harvest or replanting post
791 the current cycle.

792

793 And there were some other explanatory notes that had drafting errors in them
 794 which needed to be tidied up – so the notes explaining which rules the PC1
 795 prevailed over referred to the National Environment Standards for freshwater
 796 rather than the forestry standards, or the plantation forestry standards at the time;
 797 and also included some regulations which weren't relevant to PC1 as they were
 798 in the beds, lakes and rivers.

799
 800 Any questions on that, or should I continue?

801
 802 Chair: Mr Watson, is this an appropriate time to ask questions about Rule 20, or will
 803 you be coming back to that?

804
 805 Watson: I will be coming back to those, but if you want to ask questions now I can answer
 806 them.

807
 808 Chair: No, that's okay. Thank you.

809 Watson: I guess the key matter of contention, as we've heard, and you would have read
 810 through evidence [02.03.10] is Regulation 6 of NES or the stringency test.
 811 Although the first issue I am going to talk to is policies and the stringency test
 812 isn't directly relevant to policies, I think it's important context to understand why
 813 the policies are needed and how they support the stringency aspect of things.

814
 815 Particularly in terms of what matters need to be considered as part of a future
 816 consent process, or to encourage the outcomes sought by Council or the
 817 community through other higher order direction such as the RPS.

818
 819 The NFS doesn't provide policy direction. This is left to councils to develop
 820 based on the specific nature of the issues that they're managing. The NRP
 821 provides limited direction for forestry activities in the event consent is required
 822 either under the NES or the NRP. In my opinion regardless of whether or not the
 823 Panel accept my recommended rules and the stringency argument, I think it's
 824 important PC1 provides a better policy direction that exists in the NRP.

825
 826 I guess the only other thing to summarise my position on stringency in terms of
 827 why I'm recommending what I'm recommending in the next discussion is my
 828 position is that in freshwater PFMUS where suspended fine sediment is not
 829 needed TAS; to achieve TAS the NPS-FM at the moment requires rules to be set
 830 as limits and these need to go beyond the NES. In my view stringency is justified
 831 in those situations.

832 [02.05.20]
 833 Where TAS are being met my view is there is no need for stringency. It's the
 834 principle of 'no harm, no foul'. Ultimately there's no evidence of effects, so you
 835 can't prove that something needs to be done to meet objectives if they're already
 836 being met.

837
 838 I guess this is the other key test which has come up through evidence and legal
 839 submissions. I just wanted to summarise my view on this to assist the Panel when
 840 they are thinking about stringency, s.32 and the overlap between the NPS-FM
 841 and s.32 of the RMA in particular; and I guess the lens of clause 1.6 that the
 842 legal submissions draw on.

843

844 In part-FMUs where the stringency test is met obviously you need to assess the
 845 appropriateness of any kind of recommended provisions against s.32 of the
 846 RMA. My thought process for this followed clause 3.12 of the NPS requires
 847 Council to identify and set limits as rules to meet TAS. In my interpretation this
 848 means rules beyond those in place are needed to give effect to NPS where TAS
 849 is not met.

850
 851 The evidence and advice I've got from Mr Reardon and also a number of other
 852 stakeholders, both internal and external as part of the s.42A process, seemingly
 853 indicates a disconnect between the NES and its ability to manage its effects on
 854 water quality both in these whitua and more broadly. This is in part confirmed
 855 by the evidence of Mr Pepperell noting Council's limited information on
 856 performance of the NES in these whitua.

857
 858 Dr Greer and Mr Blyth their evidence illustrates that where TAS are not being
 859 met forestry activities will be contributing to those TAS not being met, and that's
 860 not just a kind of one and done situation. There's a window of vulnerability
 861 where effects may endure for potentially up to eight years.

862
 863 I recognise and appreciate the evidence is limited and more could be done to
 864 understand the influence of forestry activities on the achievability of TAS, and
 865 obviously the effectiveness of the NES in these whitua as well; but my strong
 866 view is that the evidence suggests more than the current requirements of the NES
 867 required to meet TAS, and if not through PC1 I question where this will come
 868 in – where this additional control or protection for the environment will occur.

869
 870 This is in the face as outlined in Mr Reardon's evidence as an approx. 47 percent
 871 increase in harvest area expected in these whitua in the next five years. This
 872 leads to a higher risk of degradation and continuation of failure to meet TAS and
 873 by association the objectives of PC1 and also the NPS-FM. So applying s.32
 874 tests through the lens of clause of 1.6 of the NPS.

875
 876 I don't consider the NES on its own with supporting non-regulatory methods is
 877 an appropriate response where TAS aren't being met. In my view, this equates
 878 to delaying to decision-making because of uncertain information, which is
 879 inconsistent with clause 1.6 of the NPS.

880
 881 Any questions on that?

882
 883 Stevenson: Thanks Mr Watson. I'm still grappling with the link between the scientific
 884 evidence and the rule framework proposed through Plan Change 1. I have wound
 885 it back to the evidence of Mr Blyth and Dr Greer and it seems that Mr Blyth has
 886 said that forestry activities generate significantly less sediment than farming or
 887 pastoral activity.

888 [02.10.00]

889 Dr Greer has said that in his view the basis for the Plan Change 1 provisions is
 890 not scientific evidence, it's again this aspect of equity.

891
 892 In your kōrero and whakaaro that Council is acknowledging that lack of
 893 scientific evidence and is relying on the need to act despite having that evidence.
 894

895 Is that a general summary of where we are going with the scientific evidence
896 and the policy framework? Are you saying the NPS-FM requires us to do this
897 despite the lack of information?
898

899 Watson: Correct, that's essentially what I am saying, yes, correct. Recognising the
900 limitations of the evidence base. There is some evidence there and doing nothing
901 on that basis would be inconsistent with clause 1.6 of the NPS.
902

903 Should I continue?
904

905 I guess this is just a summary of my approach to recommended amendments.
906 There is obviously conflicted evidence and uncertain evidence. There's a lot of
907 balls in the air with this topic and this issue generally, both in these whaitua and
908 throughout the country, as I'm sure Mr Reardon can talk to later.
909

910 In the face of that uncertain evidence base and issues of fairness and equity, and
911 I guess managing cost implications for those people going to be affected by PC1,
912 my recommendations seek to strike a balance between direction of the NPS and
913 those costs. There is still, I guess, a bit of work for Council to do to work out the
914 implementation framework for TAS and how that is reported on and made
915 available to the public in terms of the questions about certainty and how that
916 might affect activities in the future.
917

918 I acknowledge that I would also quite like to have more specific or nuanced
919 rules, as has come through on similar evidence. I agree with those viewpoints.
920 My limitation, again coming back s.32 and trying to hang my hat on something,
921 is that there is no guidance or evidence being provided to me around what those
922 more specific restrictions might look like. So what is the magic number? What
923 sort of harvest limits, setbacks or areas of earthworks and things might be
924 appropriate? Probably less of an issue for earthworks in areas of disturbance and
925 things, but it does have quite significant potential implications when we are
926 talking about setbacks and things if people can't replant their current stocked
927 area in terms of ETS.
928

929 I am also seeking to I guess provide some support for the direction of travel in
930 RPS Change 1, noting that's under appeal at the moment – or the key policies
931 which PC1 attempted to give effect to as notified have been appealed by
932 Federated Farmers and there's an ongoing mediation process on that point. The
933 relationship and impact of erosion risk mapping and the connection between
934 highly erodible land and what's been presented in PC1 is I guess a little bit of a
935 balancing act as well.
936

937 Ultimately there's two key principles to my recommendations I guess. The key
938 one is holding the line in the face of that uncertain evidence. Doing nothing, I
939 think there's a real risk that effects on water quality is going to get worse.
940

[02.15.00]

941 The harvest period for the next five years and the effects of that five year harvest
942 period could endure for fifteen years.
943

944 And, the other reason for recommendations based on the evidence and the advice
945 I have received throughout this process, is kind of shifting more to a proactive
946 space for Council to be in, rather than having to respond to adverse effects after

947 they occur; so kind of moving away from the ambulance at the bottom of the
948 cliff kind of compliance response space that Council is in at the moment.

949
950 Chair: Mr Watson, on that need for allowing Council to be proactive in its management,
951 and we've also been talking quite a bit about plan clarity and certainty for users
952 of the plan, can I just talk through a couple of examples of how rules P.R19 and
953 WH.R20 might work in practice?

954
955 I don't know if you've got the TAS tables handy – 9.2 and 8.4. I am just looking
956 at the version in Ms O'Callaghan's reply evidence.

957 Maybe I will just go to Table 9.2 for Te Awarua-o-Porirua. Suspended fine
958 sediment, I'm just interested in understanding the baseline TAS and how these
959 apply to these rules in the forestry provisions. If we take for instance Takapū
960 which is a current baseline of (d) and it has a target attribute state of (c) – and
961 TAS is expressed in numeric as well; assuming that is the baseline in the TAS
962 when and if these provisions become operative, if I'm a forestry owner first of
963 all my first question is, is it clear to me that my activities are within the Takapū
964 part-FMU – could discharge into the Takapū part-FMU? Is that clear from the
965 mapping?

966
967 Watson: Are you talking about the PFMU mapping or the erosion risk mapping? The
968 PFMU mapping I'm assuming.

969
970 Chair: Yes.

971
972 Watson: I believe so. All of that information is available online and really accessible for
973 the public to work out where their property is located in relation to those PFMU
974 layers.

975
976 Chair: So then I will know that because currently suspended fine sediment does not
977 meet the target attribute state that if I want to carry out afforestation, replanting
978 or activities that result in discharge of sediment, I would need restricted
979 discretionary activity under P.R19.

980
981 Then conversely if my forest is in the Taupō catchment it meets the target
982 attribute state, so afforestation replanting and discharge of sediment, that's all
983 regulated by the NES-CF?

984
985 Watson: Correct.

986
987 Chair: You were here yesterday when we were talking about this dynamic monitoring
988 issue. If in the life of the plan, which we could assume is ten years assuming
989 there's not another plan change, if the current state of the suspended PSS
990 changes so it meets a (c) state or better, then those activities would default again
991 to the NES-CF, right? They don't need restricted discretionary consent?

992 [02.20.25]

993 Watson: Provided that the reporting has been published which shows that TAS has
994 changed from not meeting to meeting. That's the trigger I guess for working out
995 whether or not a consent is required. There is I guess a window based on Dr
996 Greer's recommended approach which is still be ironed out, as you heard
997 yesterday, of there's at least five years of certainty for a landowner in terms of
998 activity; so they might be able to undertake over that five year period. If they're

- 999 aware that their activity needs to be staged over a long period of time than that,
 1000 in my view, there's nothing to prevent them applying for a consent on the basis
 1001 of the certainty they have when they start that activity – if they can reasonably
 1002 assess and explain the effects of those future activities to Council and they be
 1003 considered as part of the consent application.
 1004
- 1005 Chair: I'm guessing if there's a chance someone doesn't need to apply for consent they
 1006 won't be, or they won't want to rather.
 1007
- 1008 We look forward to getting Dr Greer's conclusions or recommendations on that
 1009 TAS issue. It is something we're still thinking about.
 1010
- 1011 Watson: I recognise the uncertainty and the implications for landowners in the forestry
 1012 sector. I have done my best to limit the damage, I guess, for lack of a better term,
 1013 by aligning requirements to those that they are most familiar with and that they
 1014 would reasonably be expected to do anyway if they were acting in accordance
 1015 with best practice or good management practice. That's the advice that I've been
 1016 receiving. It's not unreasonable to be requiring Council to be able to review the
 1017 appropriateness of information that landowners and forestry managers should be
 1018 preparing anyway.
 1019
- 1020 Chair: If it was to just be tagged to the baseline TAS in the operative plan, what do you
 1021 see are the potential risks or consequences of that? Is it that there's potential
 1022 over-regulation of an activity? Does it need to be because the target attribute
 1023 state is now in the course of that whatever timeframe is now being achieved?
 1024
- 1025 Watson: I guess in terms of that certainty argument, my understanding from discussions
 1026 with Dr Greer, and I don't want to leap outside my area of expertise, but there
 1027 are a number of PFMUs that are probably never going to meet TAS in the life
 1028 of a plan change; and so certainty in those situations isn't really an issue. There
 1029 are a couple of others where, as Dr Greer spoke to you yesterday, the variability
 1030 in water quality and atmospheric conditions and things means they may fluctuate
 1031 between meeting and not meeting TAS over the life of the plan. It's more of a
 1032 question for Dr Greer I think in terms of how many are expected to drop in and
 1033 out of the meeting versus not meeting TAS space.
 1034
- 1035 Greer: There's a theoretical environment risk that things get worse in a catchment,
 1036 that's always there. Then you want the additional control in those catchments
 1037 that are currently meeting TAS that might not be in the future.
 1038 [02.25.05]
- 1039 Probably the greater risk, although it's not really a risk, it's probably good for the
 1040 forestry, the Pāuatahanui Stream in particular is very close to meeting it's TAS.
 1041 Theoretically a plan has a life of ten years. We can see how much a central
 1042 government delay can add onto that. There are still first generation plans now in
 1043 the country. So this plan may well last a lot longer than ten years.
 1044
- 1045 There's TAS that might be met through that time, allowing for a less restrictive
 1046 consenting pathway for foresters. It's not going to happen in the next ten years
 1047 probably that the Council is going to come out and say, "This TAS has now been
 1048 met and the NES-CF applies to you," apart from maybe in the Pāuatahanui. All
 1049 things going well it may in 2040. That's kind of the plan.
 1050

- 1051 Chair: Having a buffer then allow for when there's a major storm event and natural
1052 sedimentation. But, I get the point. It perhaps comes back to the equity issue.
1053
- 1054 Greer: I think it does need to be ironed out how the Council are going to do this, but
1055 once a site meets its TAS any degradation that results from climate after that
1056 should not be considered as the TAS no longer being met. It can't be a pass/fail.
1057 So that's not a real risk of a natural event coming through and causing the TAS
1058 not to be met on paper and all of sudden needing consent.
1059
- 1060 In my mind you would go, "Is this because of natural events?" "We can't see
1061 that in the data." "Has there been land use change? Is there an actual increase
1062 source of sediment in this catchment?" If not, even then the Council may not say
1063 the TAS has been met. If the catchment is unchanged in its nature then they
1064 wouldn't make that call.
1065
- 1066 Watson: I think the other important thing to note, or for the Panel to understand, is that
1067 the driver of the TAS in pretty much everywhere but the Hutt is meeting the
1068 national bottom line, so it's not really an option to do nothing because then
1069 you're still not meeting the national bottom line. Dr Greer spoke to the
1070 achievability constraints about the Hutt at Boulcott TAS yesterday so I won't go
1071 over those again.
1072
- 1073 McGarry: I'm not sure what issue I'm talking to, I'm just out here somewhere. I'm just
1074 looking at your rebuttal Appendix 1 which has a few other amendments
1075 responding to submitters, but then when I look at Appendix 2 of 26 May that
1076 you've updated, you haven't brought some of those across. So I'm looking at
1077 the one for the WH.R17 and there's a new clause AA there, which I don't see
1078 on this version.
1079
- 1080 My request Mr Watson is if you could consolidate or double-check any of your
1081 rebuttal changes. There's another one there as well in terms of WH.20. It showed
1082 in the rebuttal but if we could see it in full in its context in the tracked change
1083 version.
1084
- 1085 Watson: Sorry, are we talking about Appendix 1 of my rebuttal evidence?
1086
- 1087 McGarry: Yes.
1088
- 1089 Watson: That was changes requested by submitters. That's not my recommended
1090 changes.
1091
- 1092 McGarry: [02.29.24].
1093
- 1094 Watson: I have incorporated some of those recommendations. I've acknowledged in my
1095 rebuttal statement where I have. But, no, not all of them. I guess I haven't added
1096 a column where I've said whether or not I've adopted some of those
1097 recommendations in that table. But, that Appendix 1 was just pulling through
1098 any kind of recommended changes to provisions that had come through in
1099 submitter evidence, rather than my recommendations. Sorry for the confusion.
1100
- 1101 McGarry: That's okay. So you're confident you've picked up all of your recommended
1102 changes in this 26 May document?

1103 [02.30.02]

1104 Watson: Yes. If I've accepted the submitter evidence or the recommended relief sought
1105 by the submitters then I'm confident that it's included.

1106
1107 McGarry: It's here.

1108
1109 Watson: Yes.

1110
1111 McGarry: Thanks for that clarification.

1112
1113 Chair: We'll take a break very shortly but Mr Watson, and this might be slightly left
1114 field but it relates to this maintain versus improve point we've been talking
1115 about. I know that Ms O'Callaghan in her reply provisions for HS2 and actually
1116 also in her rebuttal, she has recommended that the policy that talks about the
1117 TAS where it's being met to be maintained, and recommending deleting the
1118 words "at least maintained". That came through I think from might have been
1119 relief from the Airport.

1120
1121 I'm interested in this issue and Policy 5 of the NPS-FM which says that where a
1122 waterbody and freshwater ecosystem is not degraded then Policy 5 says health
1123 and wellbeing is maintained and if communities choose it's improved.

1124
1125 I appreciate that the WIP processes acknowledge that there isn't a lot of evidence
1126 about the contribution of forestry to sediment levels and that they supported a
1127 non-regulatory approach working with landowners.

1128
1129 I guess I just want to test a little bit more with you – because I think it's quite a
1130 fundamental concept that the TAS if it is met, the activities are managed so that
1131 the TAS is maintained, and that improvement isn't required.

1132
1133 We know based on Mr Reardon's evidence that increasing a large percentage of
1134 anticipated harvesting activities, and I forget the timeframe...

1135
1136 Reardon: Yeah, there's an increase in harvesting occurring in the next five year period –
1137 a 47 percent increase.

1138
1139 Chair: So 47 percent in the next five year period. I guess I'm just asking about
1140 maintaining the sediment TAS where it's already being achieved. I'm
1141 questioning. I don't think that is what the community had necessary had
1142 necessarily sought. I think they recognised very much that sediment is an issue.
1143 Then in light of what's anticipated in a very short period of time, five years,
1144 could there be more recognition in these forestry provisions that more than
1145 maintenance TAS is required, even where it's currently being achieved?

1146
1147 It's really quite a fundamental concept of maintain where you're achieving and
1148 whether actually it is appropriate to improve.

1149
1150 I don't know if you want to address that now, but otherwise it is something that
1151 we have been thinking about.

1152
1153 Watson: It is something that I've been grappling with for months, month and months as
1154 well, so I sympathise.

1155
 1156 I guess it's important that my recommended rules in PC1 aren't the only kind of
 1157 mechanisms that are in play here. I think it's fair to say that this process has been
 1158 a bit of a wakeup call for Council in terms of their monitoring compliance and
 1159 their implementation of the NES. I expect that's likely to significantly improve
 1160 over the coming years, regardless of what happens with PC1.

[02.35.10]

1162 I have recommended some non-regulatory methods which they focus on good
 1163 management practice, minimising sediment losses during sediment disturbing
 1164 activities, but also looking to provide incentives whether that be rates relief,
 1165 rebates or financial support in some way to encourage support of strategies and
 1166 I guess methods of forestry or methods of land management that reduce
 1167 sediment loads. Similar to the mechanisms and things that are in play at the
 1168 moment for pasture and rural land use, those don't currently exist for forestry.

1169
 1170 I guess my personal opinion on this is coming in with such strong regulation and
 1171 direction and restriction of land use without those mechanisms in place is going
 1172 to be a really tough pill to swallow for those members of the community.

1173
 1174 So I guess I've been trying to strike that balance. I guess also based on what I'm
 1175 hearing from Mr Reardon, as Council starts implementing and undertaking
 1176 permitted activity monitoring more regularly and has the right kind of expertise
 1177 and skills in place to support that, the number of consents required is going to
 1178 increase by probably quite a bit in these whaitua. I guess Mr Reardon can talk
 1179 to that a bit more later.

1180
 1181 I guess the other thing to bear in mind, which I think is probably maybe
 1182 somewhat overlooked, is that requiring consent where TAS aren't met across
 1183 the three topics in this hearing stream almost acts as an incentive for people to
 1184 pick up their game. So, with the recommended provisions in the rural land use
 1185 chapter, Ms Vivian's recommendations and recommendations in the forestry
 1186 space, I think it would be unlikely to TAS degrade. Obviously proof will be in
 1187 the pudding in terms of how the provisions and things are implemented. But,
 1188 that has been my thought process: you can't just assume non-compliance,
 1189 particularly if there's going to be an increased focus on management of the
 1190 sediment generating activities across the board. It's not just forestry.

1191
 1192 Chair: Thank you. That was very useful. When you said that you expect more consents
 1193 being applied for, was that under the NES-CF? Yes.

1194
 1195 Some of the things that we've heard and actually does align with a bit of the
 1196 experience I've had with the NES-CF is that it's very permissive, and I think this
 1197 comes out in some of the technical evidence as well. Sediment control measures,
 1198 it's adequate if there are some. It's enough if there are some but they don't
 1199 actually necessarily need to be adequate to deal with the sediment that's been
 1200 generated.

1201
 1202 I think we're talking about the NES-CF some more with Mr Reardon later, so
 1203 we'll probably leave that there.

1204
 1205 Unless anyone has anything we might take the morning break. Thank you Mr
 1206 Watson. We'll come back at 11.00am. That gives us twenty minutes.

1207
 1208 [Morning Break – 02.39.55]
 1209 [Hearing resumes – 03.01.45]
 1210
 1211 Chair: Kia ora. We are back. Mr Watson is still taking us through the issues. Thank
 1212 you. We were just discussing over the adjournment that we really appreciate the
 1213 clear way you've been answering the questions that we have. It's really helping
 1214 us to get our head around these very complicated provisions, so thank you.
 1215
 1216 If you're happy to keep it being an interactive approach as we go through to the
 1217 end of your report we would find that useful. Thank you. Over to you.
 1218
 1219 Watson: I think that kind of interactive as we go approach is probably going to be working
 1220 best because there's a lot of overlap between the provisions and
 1221 recommendations in the provisions and evidence base supporting some of the
 1222 provisions; and the expertise involved in answering questions on some of the
 1223 provisions. It might kind of bounce around a bit compared to what's in the
 1224 schedule I'm expecting. It was kind of a best guess on how this was going to go.
 1225
 1226 I'll start on Issue 8. These are the policies. As notified these policies directed (I
 1227 think I spoke about this earlier) Erosion Sediment Management Plan for all
 1228 forestry activities and prevention of new forest and continuation of plantation
 1229 forestry beyond the current harvest cycle on highest erosion risk land.
 1230
 1231 As I mentioned, submitters were really heavily opposed to that direction. There's
 1232 a lot of ETS implications as I alluded to earlier – \$50,000 a hectare is the type
 1233 of money we are talking about from my understanding. Again Mr Reardon can
 1234 probably talk more to that. That's within his area of expertise more than mine.
 1235
 1236 I guess my recommended amendments to the policies I just summarised in the
 1237 table in front of you. In response to submitter evidence, so the submitter
 1238 evidence of Forest & Bird and EDS, in light of the rebuttal evidence of Mr
 1239 Nation and My Blyth around (I guess for lack of a better term) the adequacy of
 1240 the erosion risk mapping and it being considered best available information, I've
 1241 reframed the management approach to the policies. Previously it was minimising
 1242 adverse effects and now it's a management of adverse effects. This provides
 1243 more focused policy direction through which council can decline consents if
 1244 needed.
 1245 [03.05.00]
 1246 In my view this is important because this supports the direction of Policy CC6
 1247 while it's under appeal. It just gives Council that additional level of control and
 1248 better meets the direction of travel in the RPS in terms of 'right tree right place'.
 1249
 1250 Alongside this I recommend removal of the prohibition of new and prevention
 1251 of continuation of forestry on highest erosion risk land. This is because of the
 1252 methodology to the erosion risk mapping, the uncertainty around I guess the
 1253 absolute versus relative erosion risk and the quite significant implications for land
 1254 owners if they are located within that mapped area. Again from an ETS and a
 1255 financial perspective and the supporting mechanisms to support landowners not
 1256 being in place, so they're no longer going to be able to generate a return from
 1257 that land and that's a pretty significant shift in goal posts in terms of what they
 1258 may have envisaged when they purchased or planted forestry on that land.

1259
 1260 This is on the basis that the technical evidence from Mr Blyth and Mr Peryer
 1261 indicates that natives are quite challenging in some areas in these whaitua which
 1262 would affect land owners ability to avoid financial implications under the ETS
 1263 if they can't reach certain criteria of growth at different periods - in future, if the
 1264 notified approach was retained.
 1265

1266 I guess on the path of mapping, I recommend shifting to moving away from
 1267 using the erosion risk mapping as more a blunt tool to more of a trigger for
 1268 further assessment to better align with the approach taken to the erosion risk
 1269 mapping in the rural land use topic, as Mr Willis discussed yesterday. Again,
 1270 this is on the basis that the rebuttal evidence of Mr Blyth and Mr Nation
 1271 confirmed that it was best available information and shouldn't be sidelined
 1272 completely. It was the case for my s.42A recommendations.
 1273

1274 This also supports Policy CC6 of RPS Change 1 in terms of that 'right tree right
 1275 place' that is focused on avoiding sediment risks in certain high risk areas
 1276 particularly.
 1277

1278 Other amendments – better direction for plan users regarding matters of
 1279 consideration for any consenting process. I think Ms McLeod for NZCF was
 1280 pretty strong on the lack of direction in the policies as recommended in my s42A
 1281 process in not providing any value for a future consenting process. I have taken
 1282 that on-board and provided some further direction as to how that might better
 1283 support a consenting process; and provided some more policy support for some
 1284 of those non-regulatory methods, or alternatives that might be promoted in lieu
 1285 of plantation forestry.
 1286

1287 In my opinion plantation forestry, the forestry sector, hasn't been given a chance
 1288 to demonstrate that they can manage effects on high erosion risk land in a way
 1289 that manages effects on water quality. It's kind of jumped to a "You can do this
 1290 activity at all." There needs to be some sort of opportunity for alternative
 1291 strategies, forestry types and scale harvest types that can show that forestry can
 1292 be managed in a way that doesn't increase sediment impacts – and that includes
 1293 things like permanent transition and reversion to natives. Alternative forestry
 1294 strategies – carbon forestry and things where they're currently not registered
 1295 under the ETS.
 1296

[03.10.25]

1297 I guess that's kind of the thought process in a nutshell, is to better align with the
 1298 approach taken for the rural land use topic, in terms of the use of the mapping
 1299 as a guide for site specific assessment as part of the forestry management plan
 1300 development process; and to better support the direction of travel in RPS through
 1301 a management rather than a minimisation of effects approach.
 1302

1303 McGarry: I'm just looking at P.P26 and the wording that's in lieu there obviously is in
 1304 response to submissions. I'm just wondering about (d) and the guidance there. I
 1305 guess in the back of my mind I'm thinking of section 105 and 107 of the RMA
 1306 when I ask this. I'm just thinking in my experience with resource consents in
 1307 environments which are very sensitive, some of the methods you might do is to
 1308 reduce the crop size during harvest, or to limit the amount in a catchment that
 1309 you can harvest in any one time, or the time of year.

- 1310 So, I'm just wondering whether methods could be in here. As I say, 105
 1311 particularly talks about alternative methods in terms of controlling discharges.
 1312 I'm looking at (d)(2) and just wondering whether that could be worded along the
 1313 lines of having regard to methods to reduce the risks of, which then brings that
 1314 forward in a decision makers ambit under the policy, that you're looking at those
 1315 type of methods that I've just outlined – less conditions of consents.
 1316
- 1317 Watson: I would support a recommendation along those lines, or changes along those
 1318 lines. I am happy to deal with that in right of reply if you like. Certainly that's
 1319 what the intent of that clause was trying to promote.
 1320
- 1321 McGarry: Yes, I would like to see that reflected. I'm asking these questions without
 1322 making connections to the submissions and exactly what was requested.
 1323
- 1324 The other thing that appears to me that's missing from the policy guidance is the
 1325 protection of established or existing riparian vegetation. It gets back to my kind
 1326 of question before about the five metres as well. It seems to me that one part of
 1327 the plan is trying very hard to where physically possible establish riparian
 1328 vegetation and then we've got this part of the plan.
 1329
- 1330 I just wonder whether you could consider whether a clause giving some
 1331 guidance about protecting established riparian vegetation would be appropriate
 1332 or not in this policy guidance?
 1333
- 1334 Watson: Were you wanting a response to that, or it's just a statement?
 1335
- 1336 McGarry: Is that something you think would be in the ambit of the scope of submissions,
 1337 and if it is then I'm happy for you to come back to us.
 1338
- 1339 Watson: I think it's probably within the scope of submissions of the basis of the EDS and
 1340 Forest & Bird legal submissions. My view is that management of riparian
 1341 margins and managing vegetation clearance and things are already captured by
 1342 good management practice and sustainable forestry practices which are
 1343 referenced in that policy already, without needing to be as prescription about the
 1344 types of environments that particularly need to be managed.
 1345 [03.15.10]
- 1346 McGarry: I ask this question in isolation and I'm not that familiar with the NRP, but it
 1347 seems to me that around the country most regional plans have quite strict rules
 1348 around riparian margins, whether they're vegetated or not. And, I'm not seeing
 1349 that in these provisions, so I'm just not sure what the NRP. So maybe in your
 1350 right of reply you could address that. Because that's what I'm really getting at –
 1351 it's not just water quality, it's also giving effect obviously to maintaining the
 1352 natural character of the margins of waterbodies.
 1353
- 1354 I just raise at the moment as a bit of a gap that I see. I raised it yesterday in the
 1355 language of riparian plantings that there's some reference to margin and others
 1356 not.
 1357
- 1358 If you could build my understanding of what currently is in the plan in terms of
 1359 riparian margins, or not, and how this might fit in with that in terms of guidance
 1360 for a decision maker on a forestry application. Thank you.
 1361

- 1362 Chair: Mr Watson, Policy P.P26 which we are just looking at I have a couple of
 1363 questions. This policy refers to in (b) confirming the risk of erosion from the
 1364 potential erosion risk land through forestry management plans; so the potential
 1365 erosion of risk land is the land that's identified on Maps 90 and 93. Forestry
 1366 Management Plan definition – currently the wording you support it cross-refers
 1367 to particular clauses (you've referred to them as sections) of the schedules in the
 1368 NES.
 1369
 1370 I appreciate this is about managing discharges of sediment, but if someone's
 1371 activity is now captured and they're subject to these provisions in PC1, what
 1372 about all of the things that are not listed or taken from these schedules – do they
 1373 just fall away? For example, let's just take harvesting which is Schedule 6 of the
 1374 NES, the harvest plan. When you're preparing the Forestry Management Plan
 1375 you need to identify person, property, details, maps, and you're saying here that
 1376 the contour lines rather than less than or equal to 20 metres in the schedule these
 1377 have to be less than or equal to five metres – so more precise.
 1378
 1379 But, what about the other things? What happens to those? For example, fish
 1380 species. That's just one provision that's not listed in your Schedule 6 provisions
 1381 that you carried over. What happens there if my activities captured by the PC1
 1382 provisions, what happens to those other requirements in Schedule 6 of the NES?
 1383
 1384 Watson: If consent is required the operative NRP provisions related to indigenous
 1385 biodiversity and things would still kick in. They don't fall away.
 1386 [03.20.00]
 1387 That's where those sorts of activities would be covered. PC1 only deals with
 1388 water quality. The indigenous biodiversity elements and activities in the beds of
 1389 lakes and rivers and things, which might affect fish species are covered by
 1390 existing provisions in the NRP.
 1391
 1392 Chair: Perhaps a better one to look at is...
 1393
 1394 Watson: There will probably be a link somewhere, or the explanatory notes could
 1395 probably be expanded to highlight that other provisions in the NRP also apply
 1396 where a consent is required.
 1397
 1398 Chair: I just hope that doesn't raise any issues in terms of the relationship between the
 1399 two instruments, the Regional Plan and the NES.
 1400
 1401 The significant natural areas is perhaps a better example. You've said that clause
 1402 4(2) of the schedule which is about water quality and sediment applies to these
 1403 provisions; but then the harvest plan under the NES requires that significant
 1404 natural areas that are identified particular restrictions apply there. So you're
 1405 saying that the existing NRP provisions would deal with those issues. I am just
 1406 not sure how they would make their way into the forestry management plan.
 1407
 1408 Watson: In the context of the NES, significant natural areas are Territorial Authority
 1409 jurisdiction only.
 1410
 1411 Chair: Of course, yes. It looks like you've gone through this pretty carefully and picked
 1412 up... that's fine, thank you.
 1413

- 1414 Watson: I tried to tailor it to only those matters specific to water quality, recognising that
 1415 that's the scope of PCI ultimately. But, being careful in drafting the provisions
 1416 that both the matters for discretion I guess and that there's no policy gap for
 1417 some of those biodiversity type effects that may also be present within the
 1418 forestry context.
 1419
- 1420 McGarry: I'm back on the same policy, clause (d) again. Just looking at the wording of
 1421 clause (i) I just wonder if that could be simplified in this context to the sensitivity
 1422 of the receiving environment to suspended sediment discharges; and then it
 1423 could be comma, particularly where not meeting the target.
 1424
 1425 It just seems quite clunky as it is. Just turning it around so it would just be, as I
 1426 say, the sensitivity. You would have regard to the sensitivity of the receiving
 1427 environment to suspended sediment discharges and then particularly where.
 1428
 1429 Any comment on that? I'm just looking for nice simple policies that's all.
 1430
- 1431 Watson: I can have a look at that and come back to you in right of reply.
 1432
- 1433 Kake: On the same line of questioning, going back to those policies, again as well (and
 1434 I'm not familiar enough with NRP at this stage) but thinking about clearly
 1435 drafted policy, taking for example in P.P26 sub-clause (d), those conditions, did
 1436 you give any thought to perhaps maybe this policy being drafted as a different
 1437 provision in terms of a restricted discretionary and these conditions perhaps
 1438 being matters of discretion instead. I'm just going back to the point in terms of
 1439 having some clear direction in a policy and how that might be worded to allow
 1440 plan users to better understand what the intent of that policy really is trying to
 1441 achieve.
- 1442 [03.25.00]
 1443 Watson: I guess my thought process is that I was trying to keep it as simple as I could
 1444 ultimately by the rules being quite clear in terms of what the trigger for the rule
 1445 is, recognising that they could probably be refined as well. But, I think there's
 1446 possibly more work to do in the confirming erosion risk space in that policy to
 1447 better align with the intent, confirming the actual risk of potential erosion risk
 1448 land or whatever I had in there.
 1449
 1450 I could probably be a bit more specific in terms of intent.
 1451
 1452 I don't see any set numeric limits or quantification type elements that I would
 1453 be able to bring in to make it relevant to a rule – I guess would be my short
 1454 answer; not really a short answer but would be my answer to that.
 1455
 1456 Also I guess a lack of direction around what those limits or numeric numbers or
 1457 figures might be in this context.
- 1458 Chair: Mr Watson I'm interested in the wording in P26(c) avoiding significant adverse
 1459 effects, and otherwise minimising adverse effects from discharges of sediment
 1460 on water quality. I don't particularly have any concerns with that wording, but I
 1461 just note that it is quite different from the approach to effects management in the
 1462 NES for sediment.
 1463
 1464 Has that wording come from provisions in the NRP regarding effects from
 1465 sediment, or has it come from submitter relief?

- 1466
1467 Watson: It's to provide some support for the RPS in Policy C.C6 which had a avoidance
1468 direction.
1469
- 1470 Chair: Was that avoiding significant adverse effects that policy?
1471
- 1472 Watson: No, it was avoiding plantation forestry on highly erodible land, particularly
1473 where visual clarity targets... something to do with water quality targets not
1474 being met. Sorry, I don't have it in front of me.
1475
- 1476 Chair: Thank you.
1477
- 1478 Watson: I will hand over to Mr Nation now to talk about the erosion risk mapping and
1479 how that relates to forestry.
1480
- 1481 Nation: Thank you Mr Watson. Commissioners, we talked about this yesterday, about
1482 how the erosion risk mapping was carried out. Just a bit of a refresher: we used
1483 that revised universal soil loss equation and we intercepted that with 26 degrees
1484 as the land sliding part and then for pasture originally we took the top ten percent
1485 which we called the highest erosion land, and we took the top 30 as well and we
1486 called that high.
1487
- 1488 We were also asked to have a look at forestry and woody vegetation that's not
1489 in forestry as well – so two other distinctions and that's why the mapping you
1490 will see has kind of been separated out on the Greater Wellington maps.
1491
- 1492 With regards to the forestry layer, again that was the same methodology
1493 employed there. We took the top ten percent of land that was currently in
1494 forestry, as per the land cover database. That equated to about 990 hectares I
1495 believe of land deemed at highest risk. Again that was based on the same
1496 methodology we employed for the pasture.
1497 [03.30.05]
- 1498 Of course some of the limitations, as in the pasture mapping, it doesn't account
1499 for anything specific in terms of harvest status or tree age, or forest harvest
1500 activities. The reality is per whaitua, so that percentile is based on each of the
1501 two whaitua respectively.
1502
- 1503 We generated that layer at the request of the Council to kind of have a bit of an
1504 estimate of if vegetation was to be removed off that land where the highest risk
1505 would be.
1506
- 1507 Chair: Thanks Mr Nation. Some submitters, as you said, the maps are too fine a scale
1508 and I think you've responded to that. As I understand it, if someone puts in their
1509 address these different layers come up on the mapping in the Council's GAS
1510 mapping layer. It's clear to someone if their land has been identified as being in
1511 highest erosion risk land for instance.
1512
- 1513 Nation: Yes, that's clear.
1514
- 1515 Chair: Do those maps also tell someone the part FMU that their activities might
1516 discharge into?
1517

- 1518 Nation: Yes. On that same kind of mapping platform there are the part FMU layered
1519 boundaries.
1520
- 1521 Watson: To follow up, a context perspective to clarify things for people, the mapping
1522 implications for vegetation clearance and forestry were a little bit different to
1523 the mapping implications for rural land use yesterday; whereas mapping for
1524 forestry and vegetation clearance was used as a trigger to require a consent or
1525 restrict a certain kind of land use activity. Mapping in the rural land use topic
1526 was always sitting in policy so it wasn't used to trigger rules. The application
1527 importance is a little bit different. I'm just pointing that out.
1528
- 1529 Mr Blyth now thank you.
1530
- 1531 Blyth: Thank you Mr Watson. Today I'll just summarise some evidence that considers
1532 I guess the different in sediment loads from pastoral farming, forestry and native.
1533 Primarily this is on sheep and beef. In my evidence it's a reasonable
1534 comprehensive literature review I suppose of a number of studies around the
1535 country. Many of these are peered catchment studies where they might have a
1536 pastoral farming catchment next to a native forestry catchment with similar
1537 geology and climate. Some of them are quite well-known and have been studied
1538 for twelve to fifteen years through harvest cycles of forestry. This is used to try
1539 and understand what the potential sediment loads were from forestry versus
1540 pasture.
1541
- 1542 Generally in all the studies pastoral farming over the long term generated more
1543 sediment than forestry. Native forest was generating the lowest because it's a
1544 permanent canopy. With forestry cover it's primarily driven by harvest, so
1545 there's a risk window; but during that period where forestry is immature the
1546 sediment production, land sliding risks and surficial erosion is similar to native
1547 forest from a lot of the studies.
1548 [03.35.05]
- 1549 This chart is useful and it's been reproduced in a number of documents including
1550 even in the Eastern Ward Council there in some of their guidelines. That's I
1551 guess and indication of the risk window post-harvest. It can be up to eight years.
1552 There's been studies I guess for some significant events, like Cyclone Boaler
1553 where in my evidence there's a chart showing assessment of different age stands
1554 of trees in mature forestry through to young and up to eight years old. That just
1555 shows that based on some of those studies there's this risk window that if you
1556 do have a large climatic event over that period you may have significant land
1557 sliding.
1558
- 1559 Many of the studies have shown that the sediment loads can be up to five times
1560 greater than neighbouring pasture catchments during this sort of harvest
1561 window.
1562
- 1563 I guess a thing to mention that a lot of those are clear-fell catchment studies,
1564 where they might have cleared an entire catchment with plantation forestry and
1565 rotation in some of these large blocks that we see within the whituwas and plan
1566 changes here. You might have a hundred hectares being harvested amongst the
1567 catchment and that's 8,000 hectares. It's reasonable to assume that the same
1568 trends that are seen in these national studies would be happening locally, but

1569 may not be picked up in the monitoring that's done at the SOE site, which is
1570 representative of a much broader catchment.

1571
1572 However, there is a lack of monitoring data within this plan change, within both
1573 whaitua, to be able to confirm that effects of suspended sediment increases
1574 during harvest, to confirm that.

1575
1576 One thing I kind of realised through this process was that there's these various
1577 windows of risk but no-one had quantified or had a go at quantifying potential
1578 long term contributions of sediment, so I just did a reasonably simple work
1579 scenario, which is Table 2 in my evidence, and that's considering the pasture at
1580 a nominal amount of a thousand tonnes. The loads don't really mean anything.
1581 Then using all these study proportions that was well published around say during
1582 that harvest window there might be five times the amount of sediment as the
1583 neighbouring pasture catchment.

1584
1585 So used those proportions to try work out what over a thirty year period
1586 including a harvest cycle the sediment load might be. That's roughly come out
1587 around the 30 to 62 percent.

1588
1589 I guess the 30 percent there is worth pointing out because that's a lower bound
1590 and that's primarily based off the Pakuratahi land we study in Hawkes Bay. They
1591 had I guess what you would call best management practice; they had quite
1592 significant maintenance on all their infrastructure. They had rapid replanting
1593 within twelve months and they had a period of no major storms during that post-
1594 harvest window as well. So if you took their proportions around canopy cover
1595 and return back to what the pasture loads were next door, it was in the sort of
1596 two to three year period, but there's plenty of other studies saying that pasture
1597 load, or there's an increased load for up to five years or even long – depending
1598 on the individual practices of those forestry operations.

1599 I have nominally assigned values for say the first three years post-harvest. I said
1600 it was around four times higher than pasture post-harvest in my calculations, but
1601 if you wanted to you could even expand that and say, "Well, if you did assume
1602 a worst case that it was five times for example for four or five years," that 62
1603 percent could actually increase to around the 80 percent.

1604
1605 Depending on the storms, the management practices which will vary by forestry
1606 activities, I guess that range window could be 30 to 80 percent.

1607
1608 The key thing, that last point, is the management practices play a significant role
1609 in the production. That's not just on plantation forestry, it's on pasture as well –
1610 so individual landowners and how they manage their land their activities
1611 obviously has a massive effect which is hard to predict in some simple
1612 calculation like this.

1613 [03.40.00]

1614 Lastly I will just cover this last slide and then pause for questions.

1615
1616 One of the tables I presented, Table 3 in my evidence, that's presenting some of
1617 the local water quality monitoring data and I guess the relative proportions of
1618 plantation forestry is pastoral and that's just as an indicator. It does highlight
1619 that there are some challenges – for example some of the catchments that have
1620 quite significant amounts of plantation forestry, like Whakatikei and Akatarawa

1621 24 percent and 22 percent of their catchment is plantation forestry. They're
 1622 currently in a suspended sediment class for their visual clarity and there's harvest
 1623 happening within those catchments, but they do contribute downstream to the
 1624 Boulcott TAS site which is requiring improvement in fine suspended sediment
 1625 from B to A state.

1626
 1627 That I guess is I've tried to allude to in my evidence in HS2 and in HS3, is
 1628 around the challenges of monitoring some of that comprehensively and event
 1629 based monitoring, and using the state of environment monitoring as the best we
 1630 have, because don't have consistent continuous sediment monitoring across all
 1631 of the plan change, and that's extremely expensive and time consuming as well
 1632 to maintain those sites. So it's trying to work with I guess the environmental
 1633 monitoring data that's available to make practical decisions, but also recognising
 1634 that extra could be done to try and identify potential threats during events.

1635
 1636 That last statement there, this was in discussion with Mr Watson. It was around
 1637 some of the negative effects that could happen if we prohibited forestry land
 1638 from being replanted. For example, if land was harvested and they couldn't
 1639 replant it, if there was no incentive to plant that in natives immediately the you
 1640 may end up particularly relevant for this 2040 target we have in the short term.
 1641 If that was replanted in pines you'd probably have a better sediment reduction
 1642 in that short term, than if somebody just said, "Right, I'm just going to walk
 1643 away and let it revert." If it ended up in weeds as an example or it took another
 1644 twenty years for native trees to colonise then that may have impacts on meeting
 1645 the TAS in the short term.

1646
 1647 In a long term period eventually you would know in the second rotation. If it
 1648 was in natives it would probably produce a lower sediment load if you're
 1649 thinking 50-plus years, because obviously that area is no longer being harvested
 1650 and it would stay in permanent canopy cover.

1651
 1652 It's just something to be aware of with these timelines and water quality targets
 1653 that we are trying to meet.

1654
 1655 That's everything. I will just pause there.

1656
 1657 Wratt: Mr Blyth, for the pastoral conversations yesterday you gave us information
 1658 around your modelling results. Am I interpreting correctly that you're really
 1659 saying that with forestry there's really not enough data to be able model the
 1660 likely reductions that we get in sediment from what's being proposed in PC1?

1661
 1662 Blyth: With this approach I've done in this evidence then there is a possibility you could
 1663 try to reproduce that in the CLM modelling, but this is bespoke in the sense it's
 1664 not backed. It's my assessment in this 30 year term. We could try and say that's
 1665 a good enough assessment and apply in the CLM but it hasn't been done, just
 1666 because that's not common practice in the forestry harvest modelling. Most of
 1667 it, in terms of all the detail type water quality modelling, there's a lack of
 1668 parameters there around what you would apply during post-harvest. Perhaps you
 1669 could do it on an annual basis like I have, but that comes with a bunch of extra
 1670 uncertainty I suppose. You saw those ranges – that 30 to 80 percent, so it would
 1671 be what number I choose might result in a number of problems I suppose or
 1672 challenges.

- 1673
1674 Wratt: The information, that table you gave us yesterday, and talked through the
1675 modelling that you had done through the Farm Environment Plans, that didn't
1676 include any anticipated or reduction from the forestry provisions did it?
1677 [03.45.20]
1678 Blyth: No, the forestry was treated as a permanent cover under those, so it's primarily
1679 a test of the rural provisions only, the CLM modelling; and that was primarily
1680 driven by what was required for the previous s.42A report testing those
1681 provisional scenarios.
1682
1683 Wratt: The assumption presumably is that with the forestry provisions the outcome
1684 would in fact be better than what you've modelled with just the pasture?
1685
1686 Blyth: Correct, yes.
1687
1688 McGarry: Just to understand the studies that you looked at in terms of the farming impacts,
1689 those would be prior to the stock exclusion regulations?
1690
1691 Blyth: Yes, that's correct. Most of the studies were anywhere from early 2000s. I did
1692 reference studies right up to 2024 but they weren't peered catchment studies. A
1693 lot of the peered catchment studies were done through the '80s, '90s and 2000's.
1694 The recent references are primarily just detailed studies of forestry only, not
1695 looking at pasture.
1696
1697 McGarry: So would it be fair to assume that with the implementation of fencing waterways
1698 and stock exclusion that farming input should reduce over time just through
1699 those actions?
1700
1701 Blyth: Yes it should reduce, however when comparing against forestry versus pastoral
1702 it will depend on the slope of that land that's being utilised and how effective
1703 those stock exclusion regs are. Primarily forest is occurring on steeper land, so
1704 if that wasn't pasture and if it was all fenced would depend on the low slope
1705 rules.
1706
1707 McGarry: Yesterday when you talked about the calibration of the sediment loads, that was
1708 obviously related to the land use and that also related to the forestry as well, that
1709 calibration of the loads?
1710
1711 Blyth: Yes. Inherently it's linked back to the three or four years of the continuous
1712 sediment monitoring data – the Te Awarua-o-Porirua three sites. That would
1713 have accounted any harvest that had occurred within those monitored
1714 catchments that for simplicity was not tried to tease out what proportion that
1715 harvest was contributing to that load. That is a limitation of the modelling, is
1716 that there may have been harvest effects captured within those three to four years
1717 of data, but just wasn't able to be teased out.
1718
1719 Forestry in that respect is probably not being modelled adequately in the both
1720 the [03.48.19] modelling and going forward because it doesn't capture the
1721 harvest cycles.
1722
1723 McGarry: Is that one of the advantage of bringing in a consent framework, that there's that
1724 ability to impose monitoring. I can think of monitoring in other parts of the

- 1725 country on harvesting forests. You could actually apply a condition on the
 1726 consent that they do some kind of on the ground monitoring, so you're not just
 1727 relying on the consent authority to go out and do permitted activity monitoring,
 1728 but that would be a key advantage of the consent framework?
 1729
- 1730 Blyth: Yes, the extra monitoring would be useful but I suppose it's reasonably clear
 1731 across all these studies that there is an extra sediment load with harvest; so it
 1732 would be, if you were monitoring it and expecting an extra sediment load what
 1733 would that be utilised for I suppose.
 1734
- 1735 It's whether we are comfortable with accepting that forestry has an effect on
 1736 producing sediment through a risk window and would extra monitoring be
 1737 useful? I think it's useful to identify that effect within the localised catchment to
 1738 I guess validate some of these other studies, but how you would land that back
 1739 to a TAS I'm not sure because the loads potentially could be quite high and it
 1740 might be sending you down a wrong pathway, and some sort of compliance if
 1741 their sediment loads are very high; unless it links back to those earthwork
 1742 standards with their discharge criteria perhaps.
 1743 [03.50.05]
- 1744 McGarry: I guess I'm thinking that the monitoring would identify the effectiveness of the
 1745 erosion control measures. If you've got a sediment trap you might have complied
 1746 with the NES and you've put a sediment trap in, but whether it's working or not
 1747 that's another question isn't it.
 1748
- 1749 Blyth: Yes. Good point, yes. It would be good to validate some of those.
 1750
- 1751 McGarry: Just one other and that's just on whether there's any studies available on the
 1752 reduction of sediment loads with different methodologies. I'm particularly
 1753 thinking about cable haulage versus the more traditional methods of harvest. Are
 1754 there any studies available on that?
 1755
- 1756 Blyth: Some of the studies do mention different techniques but I haven't tried to tease
 1757 out the change and I guess landslide or surficial erosion via those different
 1758 practices, no. Perhaps Mr Reardon may be able to comment on observations. He
 1759 has probably better knowledge of those practices and what you might see on the
 1760 ground.
 1761
- 1762 Chair: Sorry, I know we are overdue in speaking with Mr Reardon. We have the erosion
 1763 specialist team here. Can I just ask some questions?
 1764
- 1765 I understand the Farm Environment Plan obviously – there'll be a site visit and
 1766 a farm environment plan that's developed. Looking at the provisions in this
 1767 Schedule 36 there's the Erosion Risk Treatment Plan and the requirements there
 1768 I think seem very clear. If your land has been identified as having potential
 1769 erosion risk land then requirements for having priority Erosion Risk Treatment
 1770 Plans and that sort of thing flow from that.
 1771
- 1772 I know you're coming back to us Mr Willis on that schedule on part-E of the
 1773 Farm Environment Plans, and I think we're going to have some more questions
 1774 for you which we will put in our minute; but coming back to the Forestry
 1775 Management Plans my question there is that the equivalent management

1776 approach seems quite different for Forestry Management Plans, and I'm just
1777 wondering if there's a reason for that Mr Watson.

1778
1779 For example, I'm looking at the definition of Forestry Management Plan in
1780 number five – “any specific management strategies or practices for potential risk
1781 land that will be implemented to manage risk of sediment discharge so that it's
1782 no greater than that expected from forestry activities on land that's not potential
1783 erosion risk land.”

1784
1785 Why not just require management strategies, practices to manage the risk of
1786 sediment discharge?

1787
1788 Watson: Good question. I will be able to think about that one more carefully. I think it
1789 was the erosion risk - tying it to potential erosion risk land again I was trying to
1790 support C.C6, giving foresters the ability to show that they could manage
1791 activities on that higher risk land without having to be prevented or prohibited
1792 from undertaking activities on those land types. I guess that was the intent behind
1793 that.

1794
1795 I also note that whereas discharges from pastoral activities are an ongoing thing
1796 the discharges and effects from forestry only occur for a period of time. I think
1797 it's reasonable and valid that the approach differs. It's focused on good
1798 management practice as the activity is occurring. It's not a continual discharge
1799 like it would be in the case of rural land use.

1800 [03.55.10]

1801 Chair: It's the earthworks for forestry tracks and that sort of thing, if they're not
1802 stabilised.

1803 Also just checking why that refers to potential erosion risk land and why not
1804 erosion prone land. I think I'm just still trying to make sure I understand why in
1805 a lot of instances it comes back to potential erosion risk land, and just what the
1806 difference is really between erosion prone land in that context and potential
1807 erosion risk land.

1808
1809 Watson: I guess the vegetation clearance rules and provisions refer to erosion prone land
1810 because that's the terminology in the NRP. I guess there's a separation between
1811 vegetation clearance and forestry in terms of how they're managed. Erosion
1812 prone land links to vegetation clearance, whereas through PC1 the mapping
1813 approach I guess has changed to the PC1 mapping, which is reflected through
1814 the potential erosion risk land definition – which aligns in a way with the RPS
1815 definition of highly erodible land as Mr Nation's evidence shows.

1816
1817 Chair: Thank you also to the experts for going through and responding to Dr Basher's
1818 evidence. We'll hear more no doubt when Federated Farmers present.

1819
1820 Is it your view that the modelling and the approach that you have adopted in
1821 terms of the best information provision of the NPS-FM... or have you thought
1822 about whether it satisfies the requirements of that best information clause? Or
1823 you've presented your evidence and then that's really for Mr Watson to make a
1824 view on? Have you given any thought to clause 1.6?

1825
1826 Nation: In my opinion it's up to Mr Watson, however as in my rebuttal evidence looking
1827 at some of the mapping that is available and the resolution in terms of being

- 1828 practical or being able to make decisions at a farm or forestry scale on the
 1829 ground, certainly some of the mapping that we've demonstrated in the potential
 1830 erosion risk mapping, is at a finer resolution; and so it's really up to Mr Watson
 1831 to make a decision whether that's more appropriate or not.
 1832
- 1833 Watson: In terms of the best available information, yes I agree, which is why I have kind
 1834 of pulled it back into PC1, whereas my s42A recommendations had kind of
 1835 sidelined it completely.
 1836
- 1837 I still don't think the mapping is certain enough or the methodology is sound
 1838 enough alongside other issues I have in terms of implications for landowners, in
 1839 terms of using it as a blunt tool in rules.
 1840
- 1841 Chair: Thank you. That is I guess why you're supporting this idea with the Forestry
 1842 Management Plans. You need to get out on site and see what's happening on the
 1843 land.
 1844
- 1845 My last question on this is on the good management practices. This could be a
 1846 good segue into Mr Reardon, but are they available, are they coming, are they
 1847 being developed?
 1848
- 1849 Watson: Yes, there is a lot of best practice. We don't use the words "best practice" in the
 1850 plan. Yes, there is best practice guidance and Mr Reardon can talk to this a bit
 1851 more. In the forestry context there is forest practice guides, code of practice and
 1852 things which are treated as the equivalent I guess of the Erosion Management
 1853 Plan guidelines for...
 1854
- 1855 **[End of recording – 04.00.00]**
[NRP PC1 – HS3 Day 2 – Part 2]
- 1856
- 1857 Watson: ... earthworks in the forestry space. There is also I guess work happening
 1858 elsewhere around the country, around emerging best practice and alternative
 1859 harvesting strategies, and copper and zinc strategies – all those types of things
 1860 as well. Again, Mr Reardon can talk to that in a bit more detail, but yes that
 1861 information is available. I think I referenced in my s42A that I have spoken to
 1862 Council about making sure that's available on their forestry landing page going
 1863 forward because it's not currently.
 1864
- 1865 Chair: How does that flow through Mr Watson? I understand in the policy that there's
 1866 policy requirement to have sediment discharges managed through good
 1867 management practices. In terms of the rule, which Te Whanganui-a-Tara is Rule
 1868 20, how does that then impact? It's only if you need restricted discretionary
 1869 consent, and then you'll have a Forest Management Plan applied to the property
 1870 and if a forest manager just doesn't comply what are the implications at that
 1871 point?
 1872
- 1873 Watson: If you're not meeting TAS and you require a consent the Forestry Management
 1874 Plan allows for case-by-case consideration of the appropriateness of the eroded
 1875 sediment management control. I've kind of deliberately avoided referencing
 1876 specific best practice guidance, or specific guidelines and things to recognise
 1877 that this is a constantly moving space.
 1878

- 1879 I guess it comes down to the comfort of Council's reviewers or consultant
 1880 technical experts in terms of whether or not a Forestry Management Plan is
 1881 consistent with good management practice. That's the intent behind it. It all
 1882 plays out through that restricted discretionary activity rule without having to
 1883 prescribe specific standard or guidelines or things that must be met.
 1884
- 1885 Then I guess alongside that where TAS are being met there's the non-regulatory
 1886 methods which focus on promoting awareness and implementation of what that
 1887 good management practice looks like. That will be a case of Council being a bit
 1888 more engaged in reviewing notifications and management plans for permitted
 1889 activities and inputting back on whether or not some of the measures or methods
 1890 in those management plans are good management practice or not.
 1891
- 1892 Wratt: In the Farm Environment Plans there's a requirement for formal signoff by the
 1893 Council. There's nothing similar to that for forestry though.
- 1894 Watson: I considered that to be unnecessary duplication. Council would consider the
 1895 adequacy of the Management Plan as part of the consent process where you need
 1896 a consent. There's no need for an independent certification step. In my view
 1897 you're just tied up in the consent process until you get your Management Plan
 1898 to a level of detail that Council is comfortable with in terms of managing effects.
 1899
- 1900 Wratt: With Farm Environment Plans it doesn't only apply through a consenting
 1901 process does it – there's a requirement for signoff with Farm Environment Plans,
 1902 aside from consenting?
 1903
- 1904 Watson: I'm not a hundred percent sure on that sorry. Mr Willis might be able to clarify.
 1905
- 1906 Willis: If I understand your question Commissioner Wratt, I think you're alluding to the
 1907 fact that you need a Farm Environment Plan certified if you're a permitted
 1908 activity. Yes. So, it would be where forestry does not require a consent, whether
 1909 its plan would have been certified. I think that's the question or the point being
 1910 put here.
 1911
- 1912 Wratt: Thank you Mr Willis. Well put.
 1913
- 1914 Watson: The NES is in play in that situation, so it comes down to again the
 1915 appropriateness of the measures proposed in the Management Plan and whether
 1916 or not they're adequate to meet the permitted activity standards of the NES, so
 1917 there's not a gap as such.
 1918 [00.05.00]
- 1919 It's a question as to how far Council can take the appropriateness of management
 1920 measures included in Management Plans as part of that process. At what point
 1921 does something, even if it's contained in a Management Plan, or is it considered
 1922 appropriate and therefore complies with permitted activity standards. There's
 1923 kind of a grey area around adequacy in that space.
 1924
- 1925 Wratt: So, if it didn't comply with the permitted activities then it would require a
 1926 consent – that's really the control?
 1927
- 1928 Watson: Correct.
 1929

- 1930 Chair: Looking at the matters of discretion you're recommending, can I just ask you
 1931 maybe in your reply to look again at whether the matter of discretion, the first
 1932 one about "discharge of sediment will be managed to avoid where practicable
 1933 and otherwise minimise sediment impacts on water quality," whether you think
 1934 that is an appropriate matter of discretion in light of the policy direction, which
 1935 is to avoid significant adverse effects and otherwise minimise adverse effects.
 1936
 1937 To me I'm not a hundred percent sure that entirely flows through into the matter
 1938 of discretion that's indicated by the policy. We will also note that in the minute
 1939 that comes.
 1940
 1941 McGarry: That's sort of crystallised the question I was thinking about before with that
 1942 threshold of significance. I just wonder in a catchment which is highly sensitive,
 1943 i.e. it's not meetings it's TAS, is the threshold of significance actually too high –
 1944 because we're talking about cumulative effects. The only way to avoid
 1945 significant accumulative effects is for everybody to have mind or thereabout that
 1946 affects.
 1947
 1948 I just raise the question. I know the word "avoidance" is there but it goes to the
 1949 heart of the same question of the Chair at the moment, just to reflect on those
 1950 thresholds of significant as well in the policy.
 1951
 1952 Chair: I think we might be up to Mr Reardon finally. Sorry to keep you waiting.
 1953
 1954 Watson: Sorry, I have a couple of other slides. I think we've covered most of the
 1955 questions that you've had related to, because they were specific to the rules and
 1956 non-regulatory methods. I'm happy to wait a couple of minutes while you review
 1957 and see if there's anything jumping out at you that you want to question on that.
 1958
 1959 Chair: You're right, I think our questions have already covered those points.
 1960
 1961 Watson: I will hand over to Mr Reardon.
 1962
 1963 Reardon: Good afternoon, Commissioners. My name is Kevin Reardon. I am the owner
 1964 and Director of Form Consulting Group. We're a small forest consultancy
 1965 business based in Tawa, smack bang in the middle of the Porirua Whaitua. A
 1966 good location.
 1967
 1968 Form Consultant do forest valuation work. For my sins I'm involved in the
 1969 Emissions Trading Scheme in forestry, and in the last few years heavily involved
 1970 in the environmental space with forestry, as you can imagine.
 1971
 1972 We were engaged by Greater Wellington just over two years ago in an advocacy
 1973 and advice role, specifically looking at the Porirua Whaitua. The project
 1974 involved us going out to or contacting all forest owners, or as many forest
 1975 owners as we could. Those who had harvested, those who were planning to
 1976 harvest and visiting actual harvesting sites through the whaitua, and assessing
 1977 the activities against any NCF, but also Forest Owner Association Practice
 1978 Guides.
 1979 [00.10.00]
 1980 Most of my evidence, if not all of my evidence is related to the observations of
 1981 those site visits over the last two years. We are still doing that work in the Porirua

1982 Whaitua. The Council has extended the project out to another sensitive
1983 catchment in the Wairarapa, the Whareama Catchment, so we're over there as
1984 well visiting crews. A bit of a different profile over there.

1985
1986 I will explain a bit about the Porirua Whaitua as I go along.

1987
1988 In general, through those site visits I have seen a disconnect between harvesting
1989 and earthwork activities and what is permitted activity under the NES-CF and I
1990 will outline some of those observations in the next few slides.

1991
1992 Many of the issues we are seeing relate to smaller woodlot harvesting, and this
1993 is not a slight on small forest owners or my colleagues from Farm Forestry
1994 Association, but it does relate to basically the economics of harvesting - when
1995 you don't have the economics of scale with a smaller woodlot, you're trying to
1996 save money somewhere and generally what we have seen is that is coming at the
1997 expense of good practice or environmental good practice. Not to say that there
1998 is not issues with the larger forest owners and the harvesting there. We've been
1999 through the Greater Wellington Forest Estate doing these assessments as well.

2000
2001 Our role is non-regulatory. We are not there as a compliance arm of the Council.
2002 I see a lot of councils around the country and what Greater Wellington are doing
2003 using us is proactive. They're trying to get ahead of the harvesting and trying to
2004 improve environmental practices across the board, so that guys like Mr Pepperell
2005 are not trying to clean up afterwards what's left behind.

2006
2007 It's quite a unique initiative and it's just started really. I think there will probably
2008 be a lot more work to go through, and I can explain a bit more about what we
2009 are doing as we go along.

2010
2011 As with anything forestry related it starts with a map. I have missed a bullet
2012 point off the top there. Not many people would associate that just within the two
2013 whaitua we are looking at. There's just under 10,000 hectares of exotic forest
2014 resource within those two catchments. Most people don't associate Wellington
2015 as a high forestry area, but just in those two catchments alone you're looking at
2016 10,000 hectares of exotic forestry, all of that commercial.

2017
2018 Just on that number, just over twenty percent of that has been harvested within
2019 the last five years. I will explain a little bit about the methodology we've been
2020 through for this mapping as well, but to say that of the total commercial forest
2021 area within those catchments twenty percent has been harvested in the last five
2022 years and that also reflects age, class profile, typical of most regions in New
2023 Zealand. A lot of these woodlots or forests were planted in the 1990s and they've
2024 all come to what's known as a harvestable age or economically harvestable age.
2025 So, we've seen the start of that harvesting occur in the last five years.

2026
2027 Also of interest, of that forest area, the 2100 hectares which has been harvested
2028 the last five years, well over half of that, 62 percent, would be categorised as
2029 small forest ownership, woodlot harvesting. People ask what's the woodlot size
2030 and it could be anything from 10, 20, 30 hectares. The categories I've looked at
2031 here we've defined small forest owners as anything less than 100 hectares, and
2032 large forest owners as anything more than 100 hectares.

2033

2034 The methodology for the data assessment there, we have excluded anything
 2035 older than 40 years old. Generally, when we do this work with a forest resource
 2036 that's over 40 years old there's a good reason why it hasn't been harvested
 2037 already – that it's uneconomic to harvest is the main reason; so we've excluded
 2038 that from our data, and generally anything less than one hectare – we are not
 2039 including shelterbelts or hedges in our data. This stuff has been planted primarily
 2040 for a commercial reason. One hectare may sound small but on a small farm basis
 2041 it's actually quite a large amount of economic trees that could be harvested.

[00.15.00]

2042
 2043
 2044 The data has excluded minor species. So, 99.5 percent is P.Radiata. There is
 2045 some Eucalyptus and Douglas Fir species within the two whitua but we have
 2046 excluded that from our data. Douglas Firs are a minor species economic.
 2047 Eucalyptus is not widely regarded as an economic species. So, we've excluded
 2048 those minor species and we've just focused on Radiata Pine which would be 99
 2049 point something percent of the forest species.

2050
 2051 Also, there's supplementary evidence I was asked to do for Mr Watson last
 2052 week, which is just getting a bit more accuracy in some of those numbers, as
 2053 some of the owner forest owner intentions have become available to us in the
 2054 last weeks and months. We've updated that data.

2055
 2056 What I haven't done is indicated some of these sites or woodlots we're seeing
 2057 harvesting we know that some of them aren't getting replanted. The developers
 2058 are in there. They're logging these sites with no intention of putting them back
 2059 into Radiata Pine. I will hopefully remember to cover off the implications of that
 2060 land use change, which was due to come about.

2061
 2062 My observations over the last two years primarily through the Porirua Whitua
 2063 just the lack of harvest planning detail. These trends that I've outlined here, I see
 2064 being talked about in most councils around the country if they're looking at
 2065 what's gone on with environmental in forestry. They're looking at whether it's
 2066 the NES-CF or was it Council. I'm seeing some general trends coming through
 2067 in most regions. The lack of detail required in Harvest Managements Plans. I
 2068 think that was intentionally designed in the NES-CF when it was developed, but
 2069 the implications of that are the gaps which is allowing some operators to maybe
 2070 not be as proactive in meeting these best practices as possible.

2071
 2072 I can imagine the likes of Council officers when they see some of these plans
 2073 come through and they're looking at a map with a 20-metre contour. I couldn't
 2074 tell the environmental risk looking at a map with a 20-metre contour. I have got
 2075 examples, which I haven't been able to put in my evidence because of privacy
 2076 reasons, that when you're actually onsite and you're looking at that woodlot at
 2077 a 20 metre contour scale it looks flat, but when you're standing in front of it and
 2078 seeing that it's been harvested using ground-based methods on quite steep slopes
 2079 and the amount of tracking that's been required to harvest those trees, all under
 2080 permitted activity, I can imagine how difficult that would be for a Council
 2081 officer.

2082
 2083 The level of information or planning required currently in NES-CF Management
 2084 Plans is an issue we are seeing.

2085

2086 There's an increasing risk within not just the two whaitua but the region of
2087 higher impact ground-based logging operations. They are generally the cheapest
2088 and lowest cost-harvest system but they are also the highest impact from a
2089 tracking and earthworks point of view.

2090
2091 I noticed in one of the submitter's evidence and what we have seen as well, is
2092 that some of these second rotation blocks, so some trees that were replanted -
2093 harvested 20 years ago and replanted, and they've come up for harvesting again
2094 we call them second rotation – that even though they may have been harvested
2095 using cable hauler methods with less impact on the environment, second time
2096 around they're being logged using ground-based methods because it's cheaper
2097 and there's increase tracking. Just because the harvest system and the
2098 infrastructure is already in place from the first rotation, it doesn't mean to say
2099 that there is increased risk from those sites getting harvested again in the second
2100 rotation with the amount of earthworks that I'm seeing with the tracking that's
2101 required.

2102
2103 The general lack of material amendments is another common trend, and this is
2104 not just the smaller harvest managers - even the more commercial forestry
2105 operators working in corporate estates.

2106 [00.20.00]

2107 Whether that reflects a gap in the NES-CF or general misunderstanding of when
2108 they are triggering a restricted discretionary activity, but they are not submitting
2109 material amendments to their plans which they may have submitted to the
2110 Council.

2111
2112 One of the questions that came up before around the amount of restricted activity
2113 may increase, I think it's probably there to a degree anyway; it's probably just
2114 not being picked up. Some of this ground-based logging that I'm seeing would
2115 be triggering the restricted discretionary activity anyway if the planning had
2116 been better at the initial stages.

2117
2118 The question around is there going to be an increase in restricted discretionary
2119 activity consents required, probably I think is the answer, but it probably should
2120 have been there a little bit more to start with.

2121
2122 That's across the board and not just small-time operators. We've seen that in
2123 some of the larger corporate clients as well. So may be a general lack of
2124 understanding.

2125
2126 Our role in terms of advocacy is to get out to visit crews. What has been the
2127 highlight? We're dealing with the structures around forestry being the logging
2128 contractor or earthworks contractor. You've got a harvest manager and then
2129 sometimes you might have a cutting rights owner in the case of Greater
2130 Wellington and then you've got the landowner – so you've got four layers of
2131 management there.

2132
2133 At the contractor level and sometimes at the harvest manager level we see in
2134 their planning documentation, their prescriptions, these great references to
2135 standards, regulations and guides and not many of them actually have them on-
2136 board on their site. I would relate that to health and safety. If you were to
2137 question some of the crews around health and safety, they would quickly whip

2138 out their Health & Safety Guide WorkSafe Act from their crew huts. It's a
 2139 requirement but none of them have the environmental standards in place. So as
 2140 part of our role in that advocacy we've been giving out these guides left, right
 2141 and centre. Again, it's just a start, I think. There's other resource material there
 2142 which I was looking through the other day, which we could be giving out around
 2143 earthworks. They're great resources from the Forest Owners Association which
 2144 have been around for quite a number of years, but it's quite surprising the lack
 2145 of what we are seeing out there and who's actually got them on-board.
 2146

2147 The general lack of post-harvest remedial work has been an eye-opener. This is
 2148 generally occurring at the larger forest scale. As I mentioned, the economies of
 2149 scale these costs are getting built into the budgets. I'm talking water control
 2150 features, hydro seeding and even the road construction and having compacting
 2151 machines onsite when they're building the roads. We are generally not seeing
 2152 that at a woodlot harvesting scale. The cost would be the major barrier there.
 2153 That would be across the board for smaller woodlot harvesting.
 2154

2155 Once the harvest manager and logging contractor are gone there would be very,
 2156 very little ongoing maintenance of that site.
 2157

2158 What I have seen with some of these developers doing the logging in the last
 2159 year and currently not replanting and the sites sitting there waiting, I'm not too
 2160 sure of the timeframes of development and what's required there; but under the
 2161 NES-CF there is no requirement to replant or oversee. A change in the land use
 2162 is fine, but there's going to be implications there from a sedimentation point of
 2163 view with some of these blocks.
 2164

2165 They're quite high profile: you only have to drive up State Highway One,
 2166 Transmission Gully and you can see the harvesting that's occurred. These blocks
 2167 were miles out of town when they were planted back in the '90s and now they're
 2168 on the back doorstep. Also, the land use back then it was sufficient for economics
 2169 for forestry, but now there's much higher value in the land from a development
 2170 point of view.
 2171

2172 You're probably going to see more of these woodlots harvested and not put back
 2173 into a forest species but used for development purposes, and there's implications
 2174 for that. I haven't identified that in the data.
 2175

2176 What we can see coming up in the next five years, and there is devil in the detail
 2177 with this data (as I talk to my farm forestry colleague), there's going to be an
 2178 increase in harvesting based on the age-class profile.
 2179

[00.25.10]

2180 Anything that's greater than 25 years old and less than 40 years old we say that's
 2181 more than likely going to be harvested. This is not a plan it's just a projection.
 2182 Based on that we can see there's just over 3000 hectares which fits that category
 2183 which could possibly be harvested over the next five-year period. It's old enough
 2184 to harvest. And we're seeing that already. As I said, you only have to drive up
 2185 through Tawa and Porirua and you can see that starting around the hills. Behind
 2186 me in Tawa you might be familiar with the Prison Block. That's scheduled for
 2187 harvest. Quite high-profile sites.
 2188

2189 So that's going to be a 47 percent increase in harvesting. Even if my numbers
2190 are a couple of hundred hectares out it's still going to be an increase in harvesting
2191 from what we have seen in the last five years, just within these two whaitua.
2192

2193 Another trend which we will see is that this harvesting is going to occur over
2194 multiple smaller woodlot sites. We can see that in the data. I looked at the data
2195 yesterday and the average woodlot site might be eight hectares within the Porirua
2196 catchment and slightly higher at 12.5 hectares in the Te Whanganui-a-Tara
2197 catchment, but predominantly this harvesting is going to occur in smaller
2198 woodlots.
2199

2200 I don't think there's a silver bullet. I think there's a combination of things which
2201 probably need to be worked on, whether it's closing the gap that we can see with
2202 the NES-CF, whether it's increased monitoring or compliance. But the proposal
2203 to put in stricter controls if TAS is being met, I can't see that's necessarily a bad
2204 thing. If the TAS is being met NES-CF is there. If it's not being met then some
2205 of those tighter controls around more information I don't think is a bad thing.
2206

2207 I do have a map there if you're seeing that. That's 10,000 hectares. The red is
2208 what has been recently harvested and you will see there is predominantly more
2209 orange there which is fitting the age-class, which is what we think is more than
2210 likely going to be harvested in the next five-year period. In my supplementary
2211 evidence I have broken that down by FMU.
2212

2213 Thank you. Any questions?
2214

2215 Chair: Thank you very much Mr Reardon. You made a comment, something about how
2216 you would expect there to be more restricted discretionary consents being
2217 applied for, and I think you were talking about under the NES-CF, is that solely
2218 because of this misidentification of orange and red zones?
2219

2220 Reardon: I don't think it's related to that. I think that the lack of detail required at that
2221 planning phase and also the nature of harvesting which needs to be quite flexible.
2222 I think sometimes they're starting these operations and requiring a deviation
2223 from what they intended. More tracking, more earthworks potentially triggering
2224 that restricted discretionary – which maybe if the planning had been more
2225 thorough at the start that might have triggered it prior.
2226

2227 Chair: Mr Watson, the Erosion Sediment Management Plan, Schedule 34 still applies?
2228 No. You're recommending that be replaced with the Forestry Management
2229 Plans?
2230

2231 Watson: Correct.
2232

2233 Chair: [00.30.00] Things like management of slash and things that you would get in a harvest plan
2234 under the NES-CF, is the only place where those measures would be picked up
2235 is in the Forestry Management Plan?
2236

2237 Watson: If you needed a consent under PC1 then yes, the mechanism would be through
2238 the Forestry Management Plan and likewise if you needed a consent under the
2239 NES, Schedule 6 of the NES in the case of harvest would pick up that same
2240 detail; but you wouldn't have the additional information included in the Forestry

- 2241 Management Plan definition in terms of the highest scale of contour lines and
 2242 the requirement for ground-truthing of potential erosion risk land. That would
 2243 be the difference. You would be relying on, in the case of the NES, Council
 2244 pushing back on the level of detail included in the Management Plan submitted
 2245 at the notification stage under the NES.
 2246
- 2247 Chair: I'm just wondering if there's a potential gap because when I look at the
 2248 requirements for the Forestry Management Plan it's really the key thing as I see
 2249 is 5, in terms of managing activities; but that seems to be limited to managing
 2250 the risk of sediment discharge which is to be expected because we are dealing
 2251 with freshwater impacts here. But the other things that I'm sure Mr Reardon
 2252 would see when he's out on site, where do those come in, like managing,
 2253 containing, removing slash? Where would those be factored in if you needed RV
 2254 consent under PC1?
 2255
- 2256 Watson: That's included in the Forestry Management Plan requirements – the sections
 2257 pulled from the NES related to slash included in the definition of Forestry
 2258 Management Plans.
 2259
- 2260 Chair: Through Schedule 6?
 2261
- 2262 Watson: Yes. That's in recognition that again there's an overlap in impacts between slash
 2263 and sediment generation obviously. You couldn't just separate slash completely.
 2264 I think that's a relevant consideration – to minimise the sediment impacts or has
 2265 the potential to both minimise and exacerbate sediment impacts if not managed
 2266 properly.
 2267
- 2268 Chair: I see it's at Schedule 6(4). Thank you. Sorry, it sort of was related to what you
 2269 were talking about Mr Reardon, but I just wanted to check I understood that.
 2270
 2271 Your evidence was very clear and very helpful Mr Reardon. Thank you. We
 2272 appreciated it.
 2273
- 2274 Wratt: Thank you Mr Reardon. In your evidence you list a number of things where you
 2275 think the NES-CF doesn't provide sufficiently, which I guess the implication is
 2276 that they need to be covered in the NRP. Some that I noted down, you've
 2277 commented about detailed harvest planning and mapping, resources and
 2278 technical guides not referenced in the NES-CF, promoting revegetation for site
 2279 by oversewing with grass forest species as soon as possible.
 2280
 2281 Commissioner McGarry will be pleased to see this one: NES-CF does not
 2282 require sufficient setbacks.
 2283
 2284 My question is, do you think that what we are now looking at in terms of the
 2285 provisions that are in the latest versions that have come from Mr Watson are
 2286 addressing the issues that you've identified as not being sufficiently covered in
 2287 the NES.
 2288
- 2289 Reardon: Yes, and I see that around other councils around the country building into their
 2290 plan changes the same trends as what we are seeing here – more detail required
 2291 at the harvest planning phase. I've got the GDC, General Consent Conditions,
 2292 just came out last week and they're quite comprehensive – the additional

2293 information that's being asked outside and above the NES-CF at the extreme
 2294 end of the scale.
 2295
 2296 As I said, it's hard to pin any general failings or specific failings on the NES-CF
 2297 because it's so broad, but some of the overarching comments I see around the
 2298 country are same issues, not enough detail in the plans that are coming through.
 2299 Guys like Mr Pepperell can't make informed decisions around environmental
 2300 risk based on those plans' permitted activity.
 2301 [00.35.10]
 2302 Then you go out and see the activity and they might have to make a change to
 2303 their plan. That's not being notified. That comes down to a compliance issue.
 2304 Maybe it could have been identified better at that planning phase.
 2305
 2306 The argument is it's going to disadvantage smaller forest growers and increase
 2307 cost potentially. That's the balance, I guess.
 2308
 2309 Wratt: Thank you Mr Reardon. So, is there anything that you would like to see or you
 2310 would want to see in the NRP that's not there in what we are seeing in front of
 2311 us now?
 2312
 2313 Reardon: No. I think it's part of the NES-CF already outlining the methodology, the
 2314 harvest systems that I'm seeing being used. There's no grounds for the Council
 2315 to decline the notification based on the methodology I don't think; but as I said,
 2316 I'm seeing some sites being harvested at the lowest cost option ground-based
 2317 methods when really there's other systems available. Mechanisation, cable
 2318 methods, lower impact on the site but a higher cost. They're being overlooked
 2319 at the expense of achieve this cost option and causing adverse environmental
 2320 effects.
 2321
 2322 The ability for the Council to be able to say, "Actually, based on the slope
 2323 analysis or terrain analysis, no we don't think you should be logging this with
 2324 ground-based methods and putting tracks in everywhere," if you come back to
 2325 us with a different methodology.
 2326
 2327 McGarry: I guess this is the key for me is, how do we counteract those cost drivers, and
 2328 the only situations I can see where that's been counteracted is in the consent
 2329 process. Would you agree? Somebody might choose to take a methodology but
 2330 it seems to me the cost is always the driver unless somebody is saying it's not
 2331 appropriate in this area for effects reasons.
 2332
 2333 Reardon: That is a hard one. When you're looking at the forestry sector you've got all
 2334 different categories. You've got large forest owners with the economies of scale
 2335 and the small forest owners you've got a national standard there with rules
 2336 encompassing all, and it doesn't fit all is what I have seen.
 2337
 2338 The additional cost to a small forest owner, farm forestry have got views on that
 2339 and what that might entail. It doesn't necessarily have to be huge additional cost
 2340 I would have thought. Even if it had to be through a consent process, generally
 2341 that's not going to be the make or breaking of the harvesting operation from an
 2342 economic point of view. The slightly additional cost, it might be worth trying to
 2343 quantify what that is. Are we talking \$5,000 or are we talking \$20,000. It's all
 2344 about scale.

- 2345
2346 I don't know if I've answered your question there, sorry.
2347
- 2348 McGarry: You have. I guess, it's the key to earthworks really in all of this, because if you
2349 were using those other more costly methods on said land you wouldn't
2350 necessarily trigger the level of earthworks that those other more conventional
2351 methods might. Are we perhaps looking at this the wrong way? We haven't got
2352 to earthworks yet obviously, but should that be the trigger in erosion prone
2353 areas?
2354
- 2355 Reardon: Yes, earthworks is a big one. The harvesting methodology I wouldn't
2356 underestimate. You're going to get earthworks with the cable hauler harvest
2357 system. You've got to build the road to the top of the hill anyway. What we are
2358 seeing is with that ground-based logging which is encroaching onto sites which
2359 may have traditionally been harvested using less intensive hauler based or cable
2360 methods, we're seeing more and more of that.
2361
- 2362 McGarry: Just one other thing about the resource consent process. I'm thinking about what
2363 you said about the not replanting. If somebody went through a consent process
2364 and indicated that they have no intention to replant after the harvest, that may
2365 well change the conditions of consent that you would impose and how long the
2366 consent might go for. So, you could require some of those after-harvest actions
2367 that you've talked about. Is that one way to look at it?
2368 [00.40.05]
- 2369 Reardon: Absolutely. I think some of the sites I've seen harvesting and then doing nothing
2370 – no maintenance, no track maintenance, no checking the water control features,
2371 no replanting, no oversewing which is spreading grass seed across the site.
2372 Waiting for development opportunity. Land banking. You can see those sites
2373 around Wellington now.
2374
- 2375 Whether or not it's a requirement, it's the landowner's prerogative to what they
2376 do with their land in terms of replanting or not. But, not doing anything, or in
2377 terms of even putting it back into a grass cover, is a worst-case scenario I would
2378 have thought.
2379
- 2380 McGarry: That changes that window of vulnerability, doesn't it?
2381
- 2382 Reardon: Absolutely yes,
2383
- 2384 McGarry: My understanding is it's five to eight years, and the eight years being when you
2385 sort of do the nothing and just leave the slash there that could be as long as eight
2386 years. Is that your understanding?
2387
- 2388 Reardon: The five to eight years is assuming that you're replanting the site. There is
2389 increased risk if you're not replanting the site that window probably stretches
2390 out further.
2391
- 2392 I'm aware of some sites around the catchments now would be pushing four years
2393 with no remedial work post harvesting and just reverting back to weeds. Weeds
2394 are better than nothing as well. But there's no requirement to. If you're not going
2395 to replant it then maybe you should be grassing it over as the minimum for trying
2396 to mitigate any future sediment loss. That's not happening.

- 2397
2398 McGarry: Just one final one. It's from your evidence at paragraph 30. You've said,
2399 "Sediment loss is most extreme in the four years before and after harvest." I'm
2400 just wondering if you can explain the before bit. That sort of struck me as odd.
2401
- 2402 Reardon: Sorry, I did pick up on that typo. It shouldn't be four years – maybe one or two
2403 years you're seeing roading going into some sites prior to harvest is general
2404 practice. Definitely before harvesting there is some risk with earthworks, but
2405 maybe not four years, sorry.
2406
- 2407 Kake: Thank you. Your evidence was really helpful. I'm just double-checking. It's just
2408 a quick one that you will be here for the earthwork's discussion later this
2409 afternoon. It's around that risk of the harvesting practice and the appropriate time
2410 to undertake that harvesting. Obviously, it's better to do it when it drier?
2411
- 2412 Reardon: I've picked up a comment from a harvest manager. Generally, those smaller
2413 woodlots maybe they might be trickier harvesting but they were always done
2414 during the summer months – drier and less impact. Great. But we're not getting
2415 those drier summer months regularly anymore. With climate change you've got
2416 just as much chance of heavy rainfall events during the summer months as you
2417 do with winter events.
2418
2419 Traditionally, trying to mitigate that sedimentation loss by harvesting during the
2420 summer, I think that's an historic viewpoint now in most regions.
2421
- 2422 Chair: Mr Reardon, you say in your evidence that the approach that was notified in the
2423 PC1 provisions to highest risk mapping would not have been appropriate to
2424 manage forestry activities onsite. Have you reviewed the new approach to
2425 mapping that Mr Nation and Mr Blyth are now recommending as a more
2426 appropriate mapping approach, and do you think that that approach is going to
2427 identify the areas of land where Forestry Management Plans are going to be
2428 needed to manage forestry activities?
2429
- 2430 Reardon: No, I haven't, but at the end of the day it's a tool. It's a tool to guide where the
2431 erosion risk might be highly susceptible. I think you'll find most harvest
2432 managers or planners are using higher and above land than what the mapping
2433 tool that's proposed. They're looking at LIDAR data. They're looking at terrain
2434 analysis. They're looking at slope. Not just the basic ESE tools.
2435
- 2436 Chair: [00.45.00] As I understand it, these requirements for the Forestry Management Plan only
2437 come in if you are on potential erosion risk land and then that can be ground-
2438 truthed by an officer onsite. It's only then if the TAS is not being met. It's a
2439 consenting requirement otherwise it's all non-regulatory measures.
2440
- 2441 Based on what you're saying – and I think we need to come to Mr Watson
2442 perhaps in his reply to comment on that - but I am wondering if there will be
2443 some activities that should be managed through a Forestry Management Plan
2444 but under these current provisions they won't be captured.
2445
- 2446 Watson: I guess the essence of your question is, should the Forestry Management Plans
2447 apply to more than just where TAS isn't being met.
2448

- 2449 Chair: Yes, and also to areas broader than the potential erosion risk land.
2450
- 2451 Watson: I guess Mr Reardon's evidence was in response to a pretty specific question, in
2452 terms of what I was trying to tease out of him, which was I guess concerns from
2453 submitters about the pixilation and the isolated pixels on highest erosion risk
2454 land having broader consequences requiring retirement or loss of productive
2455 estate on land areas outside of just those mapped areas because of how that had
2456 been mapped. And so, at a property scale that is the question that I had kind of
2457 asked Mr Reardon – like, is that the case, if this is identified as highest risk land
2458 will that prevent the harvest of this land over here that might not be highest
2459 erosion risk land for example. The ECS implications are associated with that as
2460 well, which hadn't been properly evaluated or quantified.
2461
- 2462 I think that's probably important context around that question, or that statement
2463 in Mr Reardon's evidence. Not to speak for him, but that was the essence of his
2464 response to that question.
2465
- 2466 I guess in terms of potential erosion risk mapping, that would also apply based
2467 on how the policy is written is a consent is required under the NES as well. If
2468 it's a restricted discretionary activity under the NES, or a controlled activity
2469 under the NES, those policies would still apply, so the Forestry Management
2470 Plan requirements I would expect would kick in. So, Council could have the
2471 ability to request Forestry Management Plans as they exist in PC1, rather than
2472 just the NES. That might need to be clearer but that was the intent.
2473
- 2474 I guess that was the thinking – if you need a consent Council has the ability to
2475 require those Forestry Management Plans as they're written in PC1. So, you
2476 could get that additional information as part of the process. The matters of
2477 discretion were drafted in a way that they reflected in a broad way all of the
2478 matters for discretion that would be covered under the NES, so that there was
2479 no gaps, if that makes sense.
2480
- 2481 Sorry, that's a long-winded answer to your question, but it's I guess a
2482 complicated way of looking at things.
2483
- 2484 Chair: I think we're ready to move to Mr Pepperell. Sorry, we are running late. Is there
2485 any other?
2486
- 2487 Kake: Just out of interest, just in your experience – and it's to do with native vegetation
2488 – how that might work when you've got pine growing (and it's really not related
2489 too much) but is there the opportunity of native forestry to grow at the same time
2490 as some of these mature Pine Radiata?
- 2491 Reardon: That's a good question. It was one of the noise in my data.
2492 [00.50.00]
- 2493 I haven't identified what's possibly permanent forest out there – exotic forest.
2494 The buzz word in forestry at the moment is transitional forestry, so not
2495 harvesting your pines and managing that as a permanent indigenous forest
2496 coming through the understory. You see it working quite well on the Tinakori
2497 Hill. It's a new concept around New Zealand. There's plenty of examples. That
2498 may become more prominent.
2499

- 2500 Chair: I think that takes us to Mr Pepperell. Thanks very much Mr Reardon. We are
2501 behind schedule. I am hoping that we can catch-up a bit of time after the
2502 lunchbreak with the rest of Mr Watson's evidence. If there's a chance that we
2503 could cover Mr Pepperell before the lunch adjournment, but I don't want to rush
2504 you. We won't finish straight at one. We'll see how we go with your presentation
2505 Mr Pepperell. Thank you.
2506
- 2507 Pepperell: Good afternoon, commissioners. My name is Josh Pepperell. I have been part of
2508 the Environment Regulation at Greater Wellington for the past five years. I
2509 acknowledge that my evidence is quite contextual, essentially setting the scene
2510 and stating the facts of our compliance programme to date since the NES was
2511 introduced, calling on various people within the department who have been there
2512 throughout, as well as my own experience.
2513
- 2514 I will essentially go through. I have kind of pulled out I suppose some of the key
2515 contextual matters that I feel important to raise at this point in time. I will briefly
2516 go through those and then a couple of the challenges that I've highlighted in my
2517 evidence. I will try to keep it pretty brief.
2518
- 2519 Obviously under the current NES framework one of our key roles and
2520 responsibilities is receiving those permitted notifications. We have a system in
2521 which we do that. We have the ability to request management plans and
2522 obviously undertake monitoring and compliance of those permitted activities
2523 that fall under the requirements of the NES-CF.
2524
- 2525 In addition to the permitted side of things obviously we are responsible for
2526 processing the resource consents where activities fall outside those permitted
2527 standards, and we also under a compliance monitoring programme for those
2528 activities as well.
2529
- 2530 I've tried to highlight it in my evidence, but it's important to note the difference
2531 – obviously I've been able to deal with forestry compliance across the whole
2532 region, but specific to these two whitua it's important to note that under the
2533 NES erosion susceptibility classification it is predominantly green and yellow
2534 zoned, so that's classified as low risk to moderate. I tried to illustrate that in my
2535 Appendix 1 of my evidence – noting that there are some patches orange zone
2536 high risk and a very, very small part in Te Whanganui-a-Tara of red zone, up in
2537 the Tararua Ranges there.
2538
- 2539 Generally, based on the ESC [53.40] zoning, because of essentially the trigger
2540 for resource consent, predominantly forestry activities are seen as permitted
2541 within these two whitua, provided those conditions are met.
2542
- 2543 Currently there are four active resource consents for harvesting and earthworks
2544 within the two whitua. These were granted from 2023 onwards.
2545 I do note in my evidence I outline that there are nine in total. The remaining to
2546 other activities such as slash traps and river crossings.
2547
- 2548 Two of the four resource consents were consented under NES-CF but I do note
2549 in paragraph 39 the other two resource consents were granted under the NRP
2550 because of the nuance with the wording around plantation forestry and urban
2551 zone areas.

2552
2553 Just for context too, currently there are 46 other active resource consents across
2554 the whole region, so that kind of puts it into perspective.

2555
2556 In terms of site inspections of those four forestry sites within the whitua, three
2557 of those have had site inspections to date. One has not had one because
2558 harvesting works have not yet commenced – but it is likely to be monitored later
2559 this year.

[00.55.10]

2560 In terms of reporting data that I was able to find, within the 2023 to 2024
2561 financial year we did approximately about ten to twelve site visits to permitted
2562 forestry activities. At least three to four of these were on Council owned land. I
2563 acknowledge that one of the biggest landowners within these two whitua is
2564 obviously the Regional Council; and since around 2022 we have implemented a
2565 bit more of a structured regime around how we monitor forestry sites on our own
2566 land. We visit them at least three times a year.

2567
2568
2569 In terms of enforcement, just touching on that, it's been about a total of four
2570 infringement notices. Two of these were issued a couple of years ago and were
2571 more related to logging trucks and the use of a river crossing and the sediment
2572 discharges associated with that. Just noting that those infringements weren't
2573 directly related to harvesting and earthworks specifically.

2574
2575 The other two infringements were more recently in 2024 and these related to the
2576 unauthorised use of land and discharge of sediment associated with the
2577 harvesting activities themselves and various parts of the earthworks such as skid
2578 site construction.

2579
2580 In terms of the challenges, as I sort of outlined in my evidence, the NES-CF
2581 regulations have been and still are quite hard to enforce due to a lot of the
2582 provisions which can be left open to interpretation, some of which have already
2583 been outlined today.

2584
2585 We acknowledge that forestry operations can be quite a dynamic environment
2586 and difficult – so totally acknowledging that side of it, but in scenarios when the
2587 standards allow for a degree of discretion or interpretation of the circumstances
2588 it can be quite challenging on the ground to determine whether something is
2589 compliant or not.

2590
2591 I provide an example where in some cases we might get some pushback around
2592 the removal or moving slash away from an area that potentially might cause an
2593 adverse effect, but it would be unsafe to do so – and that's obviously linked back
2594 through into the NES. This essentially means that when a forestry company
2595 deems it unsafe it is really difficult for us to require them to actually undertake
2596 that.

2597
2598 Several other provisions in the NES-CF also contain terms that are not clearly
2599 defined or can leave room for interpretation. Terms such as reasonably
2600 practicable steps or, as you have outline earlier, appropriate controls and bits
2601 like that.

2602

2603 Often this language does lead to disagreements between Council staff and the
 2604 forestry operators over what compliance looks like and is really tricky in special
 2605 circumstances when we need to enforce the rules.

2607 Another challenge, going back to when we receive the permitted notifications,
 2608 is the templated nature of some of the management plans. It can be reasonably
 2609 straight forward to meet the requirements of Schedule 6 of the NES currently
 2610 with essentially a templated management plan where they don't have to define
 2611 exactly what sediment controls or mitigations they might use – they might list
 2612 them all, and that's essentially meeting the requirements of that. So, less room
 2613 to pushback in some cases.

2615 I suppose just in response to some of those challenges too, I just want to highlight
 2616 that through the consenting pathway (and again it's already been raised) the
 2617 importance of that site specific assessment and how each proposal could actually
 2618 be evaluated in the context of whether it's the erosion risk, proximity to
 2619 waterways or other significant areas.

2620 [01.00.00]

2621 Again, it just provides that opportunity to tailor more site-specific conditions
 2622 and measures that are better or more easily enforced.

2624 I suppose just touching on the consent process as well – input from mana whenua
 2625 in terms of our existing consent process and how we manage that, there's
 2626 obviously more opportunities there for that further engagement and
 2627 consideration.

2629 I will leave it there for questions. Thank you.

2631 Stevenson: Thanks Mr Pepperell. I would like to connect back to a comment Mr Reardon
 2632 made about the lack of awareness of regulations on the ground and some
 2633 comments in your evidence about lack of compliance monitoring, enforcement
 2634 and expertise around forestry. It was good to hear at the end of your kōrero the
 2635 support for the PC1 provisions, particularly the mana whenua involvement that
 2636 that would facilitate.

2638 Do you think that with PC1 and the changes it introducing, those fundamental
 2639 issues on the ground and in Council's compliance, monitoring and enforcement
 2640 side of things, will ensure decent implementation of PC1?

2642 Pepperell: Yes, I do. I think when I turn my mind to that consenting process, and I
 2643 acknowledge in my evidence I did go in quite heavily around our lack of
 2644 expertise, but I suppose that's not saying that we don't have any at all, there is
 2645 definitely a level of capability within our department that has grown as we've
 2646 been able to do more compliance. I think taking it to that next level in the consent
 2647 process just allows us to engage further expert input in those areas where we
 2648 aren't well-versed.

2650 One I can think of is around the harvest methodologies, like Mr Reardon has
 2651 alluded to, and actually the location potentially of one skid site compared to
 2652 another and the actual ground-based versus tethered machine is where we don't
 2653 have the expertise to actually advise what's the environmental benefit of one

- 2654 versus the other. That's where through that we would be able to have better input
2655 into that process decision-making.
2656
- 2657 Stevenson: Thank you. A follow-up: to the proportionality of impacts for those small
2658 woodlot owners and the implications of the consent process and the additional
2659 expertise it would bring in, how is that cost implication or regulatory burden
2660 going to be appropriate for those smaller woodlot owners?
2661
- 2662 Pepperell: I think that would be factored in, in terms of understanding the scale of effects
2663 that might occur from an application that we receive. In terms of expert input, it
2664 would be reflected by the time that we would engage them to do the work.
2665
2666 There would also be a degree of internal training to understand actually is there
2667 a level where our expertise internally is enough to actually assess the effects of
2668 the activity?
2669
- 2670 Chair: Mr Pepperell, you talked about these provisions having an opportunity for mana
2671 whenua involvement. Wouldn't that only be if they were limited and notified.
2672 Perhaps you or Mr Watson could explain how mana whenua engagement would
2673 happen.
2674
- 2675 Pepperell: In terms of my compliance experience also on the flip side of that and being in
2676 the consenting space as well over the past five years, speaking from that
2677 experience, currently with any resource consent that we receive there's an
2678 agreement with our mana whenua partners that that application is sent to them
2679 for review. We have agreement in place around how that process works
2680 obviously.
2681
2682 That was the first thing that came to my mind in terms of that – if a resource
2683 consent came in that it would automatically go through that system, but also
2684 through the rule framework there's an opportunity for us to actually take more
2685 consideration of cultural matters.
2686 [01.05.10]
2687 We often are in scenarios where we have schedule cultural sites of significance
2688 in our Regional Plan, but actually it's the mana whenua partners on the ground
2689 who understand what cultural values there are, and so through a consent process
2690 it can go down to that next level of detail and get that information we require.
2691
- 2692 Chair: Thanks very much. Mr Watson, you don't think that any amendments are needed
2693 to the matters of discretion in light of what Mr Pepperell has said?
2694
- 2695 Watson: The matters of discretion include potential adverse effects on mana whenua
2696 values, if that's what you're alluding to.
2697
- 2698 Chair: Schedule C which was a point that we've discussed in other hearing streams,
2699 yes. Thanks.
2700
- 2701 Kake: Just acknowledging that schedule is there under those matters of discretion,
2702 WH.R18. I suppose just linking back up to the NES-CF, there is reference to
2703 Treaty Settlement statutory acknowledgement areas that go over some of these
2704 waterbodies and that's triggered under RDA restricted discretionary activity.
2705

- 2706 I suppose I note that Schedule C essentially just trying to think in my head if it's
 2707 different to statutory acknowledgements. Schedule C is sites of significance.
 2708 That notification test I suppose just happens by way of the consenting process
 2709 anyway. Just checking my brain is working.
 2710
- 2711 Watson: I think the Treaty Settlement requirements that are through the NES are again
 2712 limited to TA jurisdiction. They don't apply to the Regional Council. It's in the
 2713 context of significant natural areas I believe.
 2714
- 2715 Kake: I might think about that one.
 2716
 2717 So, thinking this through then, in terms of a practical application, the Council I
 2718 suppose by way of practice is essentially notifying anyway in terms of current
 2719 practice.
 2720
- 2721 Pepperell: Correct. Every application gets uploaded or is sent to our mana whenua partners
 2722 as it is lodged, and then we have our own internal process with how we follow
 2723 up with that and deal with that, but it gives them the opportunity to provide
 2724 comment if they haven't already been engaged by the applicant.
 2725
- 2726 Kake: I suppose just leading onto that then, and then obviously understanding the
 2727 permissive nature of the NES-EF, where it's permitted activity that notification
 2728 might occur.
 2729
- 2730 Pepperell: Correct.
 2731
- 2732 Kake: Mr Watson, do you think that might be a gap?
 2733
- 2734 Watson: If it's a gap it's an existing gap, and it's an existing gap that applies nationally.
 2735 There is no requirement to consult with the iwi as part of the NES-CF. That
 2736 would be left to I guess councils and their internal processes as to whether they
 2737 provide a copy of the notification or management plan to iwi. I am not sure how
 2738 that works in other regions, but I can imagine that might play out in some areas,
 2739 in Tairāwhiti for example, potentially, given the level of scrutiny over some of
 2740 the forest activities happening.
 2741
- 2742 Kake: Just another question around monitoring, because we have heard quite clearly
 2743 from mana whenua that they want to be involved in monitoring, WH.R20
 2744 references s.35 with respect to monitoring.
 2745 Is there an opportunity there just with respect to monitoring with mana whenua
 2746 in a partnership? Are we limiting the monitoring and enforcement capability of
 2747 Council by just referencing s.35(2)(a)?
 2748 [01.10.05]
- 2749 Watson: So that's s.35(2)(a) is basically the collated monitoring record of the previous
 2750 however long duration Council comes up with in terms of their state of
 2751 environment monitoring recording. It's just a factual report over the quality of
 2752 water quality and whether it is or is not meeting TAS ultimately.
 2753
- 2754 Greer: Section 35(2)(a) is also the general monitoring of plan effectiveness and policy
 2755 statement effectiveness as a whole, so in terms of cultural values, those that are
 2756 monitored I presume will be reported on in there was well.
 2757

- 2758 Kake: I think I just had a mind-blank in terms of [01.10.51] monitoring and monitoring
2759 of consent conditions.
2760
- 2761 Just one last quick one, sorry, just with respect to the infringement process that
2762 the Council undertakes. I'm assuming there's a bit of a graduated response
2763 model that the Council follows and education might be the first port of call.
2764
- 2765 Pepperell: Yes, correct, there's a process that we follow and take into lots of different
2766 factors such as obviously the environmental effect, but also contractor
2767 behaviour. It takes a long list of different things into account to reach that
2768 decision.
2769
- 2770 McGarry: I'm just looking at your paragraph 19. You have alluded to the proactive
2771 permitted sites that you've visited. From what you've said, the focus has been
2772 on Council owned land. Has it included private small woodlots, like Mr Reardon
2773 talked about?
2774
- 2775 Pepperell: Yes, it has included some. I suppose when we introduced in 2022 our... as we
2776 had more compliance staff come on-board an easy place to start was on our own
2777 land, given we were one of the biggest landowners and actually start to regulate
2778 that. Obviously as a Council we want to hold ourselves to a high standard, so
2779 that was part of that.
2780
- 2781 But, yes, there has been other permitted site visits outside of Council owned
2782 land. I just couldn't quantify that because unfortunately our reporting systems
2783 aren't well-aligned with consented and permitted. I couldn't get a definitive
2784 number prior to 2023.
2785
- 2786 Chair: Just to check, and I think you might have responded to this when you replied to
2787 Commissioner Stevenson's question, but you have worked with Mr Watson –
2788 you've looked at these provisions and you are confident that that is going to
2789 result in an improvement in what you've identified in your evidence as the
2790 challenges with enforcement and monitoring?
2791
- 2792 Pepperell: Yes. I acknowledge that there are parts where, as Mr Reardon referred to, other
2793 Acts, Health & Safety Workforce. Through additional requirements through
2794 consent conditions – as an example, require as-builts over erosion sediment
2795 control so we're getting that certification prior to activities actually being
2796 undertaken, rather than us being at the back end of reactive response.
2797
- 2798 Chair: I think you have also talked about how your background has also been in
2799 consenting, so you've got that perspective as well which is really useful.
2800
- 2801 Thank you very much. I think that was all we have. We'll take the lunch break
2802 there. When we come back, I think we are hearing from Dr Greer, Mr Watson
2803 on Issue 14 and then we'll hopefully be able to catch-up the time in the afternoon
2804 session before Ms Vivian's session.
2805
- 2806 [Inaudible background discussion – 01.14.32]
2807
- 2808 If we come back at two o'clock. That gives us 45 minutes. Thanks very much.
2809

2810 [Lunch Break – 01.15.05]

2811 [Hearing resumes – 02.01.50]

2812

2813 Chair: Kia koutou. Welcome back everyone to the afternoon session. Mr Watson is
2814 continuing with his s42A Report. I think we are up to Issue 10. Thank you, Mr
2815 Watson.

2816

2817 Watson: I guess there's not a lot more that needs to be covered that hasn't sort of been
2818 covered through discussions already. Both Issue 10 and Issue 11 are just deletion
2819 of the more restrictive provisions as notified – so discretionary activity and
2820 approved activity status, and it's on the basis of the evidence base and the
2821 justification for rules. I don't think there's a need for rules more stringent than
2822 restricted discretionary activity personally.

2823

2824 That's the approach that I've taken but happy to answer questions on that if there
2825 are any, otherwise the rest of it should be relatively quickly I expect.

2826

2827 Likewise with Schedule 34. We covered most of the key things related to this in
2828 discussion previously, in terms of answering questions from yourselves. But, I
2829 guess the key change here is the deletion of Schedule 34 and replacement with
2830 the Forestry Management Plan definition and aligning the requirements or
2831 information requirements with the more familiar kind of format of the NES with
2832 the additional detail that I have discussed previously in terms of additional
2833 contour, scalp mapping and the additional assessment of higher sensitivity areas
2834 – so that's the erosion risk land and scheduled sites under the NRP.

2835

2836 That's kind of wrap-up in terms of the ability of provisions, sediment losses and
2837 things to meet TAS, so I will hand over to Dr Greer.

2838

2839 Greer: Good afternoon. In this presentation I was basically just going to respond to
2840 some of the submission points in my statement of primary evidence.

2841

2842 Chair: Sorry to interrupt Dr Greer. Sorry Mr Watson, there was just one point I wanted
2843 to ask you about before you move onto Dr Greer.

2844

2845 In response to the submitter Yvonne Weeber who had raised an issue about
2846 whether amendments were required to address slash and debris causing flooding
2847 and storm events, and I think your response in the report is that "No relief is
2848 sought and therefore I make no recommendation."

2849 [02.05.05]

2850 Can I just check, based on what we were talking about earlier, the Forestry
2851 Management Plans there is the ability through that process to address how slash
2852 and debris post harvesting is managed?

2853

2854 Watson: Yes, that's correct. The restricted discretionary activity will also require
2855 consideration of slash essentially through the Forestry Management Plan's
2856 process. If not, restricted discretionary under PC1 and those same requirements
2857 apply through the NES.

2858

2859 Chair: Assuming it's in an area where the TAS is not being met, is that because there's
2860 always an element of managing sediment with those effects of slash and debris;
2861 so, because of that there's the appropriate link through to managing...

- 2862
2863 Watson: Correct. That's the overlap between those two activities and the ability of slash
2864 to either manage the effects of erosion but also to exacerbate effects of erosion
2865 depending on how it's kind of handled at the post-harvest stage.
2866
- 2867 Chair: Thank you. Sorry Dr Greer.
2868
- 2869 Greer: No problem. I was just going to go over the responses to submissions which is
2870 pretty much the scope of my evidence on forestry; the first point being that I do
2871 not agree with those submissions that there is a lack of scientific evidence
2872 linking sediment losses from commercial forestry to the exceedances of the
2873 suspended fine sediment Target Attribute States.
2874
- 2875 In his evidence Mr Blyth has drawn on the available literature to describe the
2876 relative losses from pasture, native forestry and commercial forestry over a
2877 thirty-year period, and that analysis suggests commercial forests lose six times
2878 more sediment than native forest over a thirty-year timeframe.
2879
- 2880 From a scientific perspective this supports the position that forestry does
2881 contribute to the visual clarity target attribute states not being met in those
2882 catchments where it contributes a significant proportion of modified land cover;
2883 and there are catchments particularly in the Hutt where forestry is the
2884 predominant form of modified land cover.
2885
- 2886 However, I do acknowledge that the extent to which the notified provisions of
2887 PC1 or the NES-CF, the extent to which they will reduce losses from forestry
2888 hasn't been assessed.
2889
- 2890 So, there is a general lack of scientific evidence that PC1 forest provisions are
2891 necessary to achieve this as being a fine sediment TAS, or that the NES-CF is
2892 insufficient.
2893
- 2894 In their evidence, both Mr Cairns and Mr Hanson of the Wellington Branch of
2895 the NZFFA and Guilford Timber make a number of comments regarding the
2896 potential contribution of urban development, river engineering and severe
2897 weather to sediment loads in the Hutt catchment. In my opinion, none of these
2898 comments justify relaxing the commercial forestry provisions of PC1. The best
2899 available data suggests that commercial forestry is an antigenic source of
2900 sediment and that reductions in sediment losses from those tributaries of the Hutt
2901 where commercial forestry is the predominant land cover are necessary to
2902 achieve the TAS in the Te Awa Kairangi lower main stem.
2903
- 2904 I don't consider that any of the information introduced by Mr Cairns or Mr
2905 Hanson constitutes scientific evidence that contradicts this.
2906
- 2907 I also do not consider there to be a scientific basis for Mr Cairns' suggestion that
2908 the Council should treat the Makarā Stream, Mangaroa River and Horokiri
2909 Stream and the Hutt as well as if they fall within Sediment Class 2 under the
2910 NPS-FM in order to allow for less stringent national bottom lines to apply.
2911
- 2912 I read the presentation notes provided by Mr Cairns, to talk to his submissions,
2913 and he does cover this again. It is important to understand that regardless of

2914 whether temperature has changed in these catchments, the way that the national
 2915 bottom lines are applied to different sediment classes, they simply group rivers
 2916 that are similar. If the temperature has increased in these rivers, it has also
 2917 increased in the rivers that they are grouped with. It doesn't justify changing
 2918 them.

[02.10.05]

2919 Also, Council has no discretion to apply different suspended fine sediment class
 2920 to a river. It's a redundant point to start with putting aside the scientific issues
 2921 with the argument.
 2922

2923
 2924 As we have touched on multiple times throughout this hearing stream, I am in
 2925 agreement with Mr Cairns that the Council needs to develop and implement a
 2926 consistent approach for determining when and where the target attribute states
 2927 are met. There is simply too much variability in water quality data to expect
 2928 regulated parties to determine their own activity status through assessment
 2929 against a TAS using a simple pass/fail approach on an annual or even monthly
 2930 basis.

2931
 2932 In my opinion there is little benefit in benchmarking against the TAS more
 2933 frequently than the five yearly Regional Policy Statement and plan effectiveness
 2934 reporting required by s35(2)(a) of the RMA.
 2935

2936 To be honest with you, I don't think there's any benefit in assessing it for at least
 2937 the next ten years.
 2938

2939 Suggestions that there will be many commercial forestry activities undertaken
 2940 away from any waterway are simply incorrect. Ninety percent of Te Whanganui-
 2941 a-Tara and Te Awarua-o-Porirua are within half a kilometre of a river.
 2942 Regardless of proximity, if a forestry block generates run-off sediment in that
 2943 run-off will be discharged to a freshwater environment. There will be some
 2944 deposition along the pathway, but if water is running off the land and into a river
 2945 the contaminants contained within that water will also be discharged to a river.
 2946

2947 In his evidence, Mr Hanson (and I'm a bit confused about exactly what he is
 2948 requesting) requests that you replace the broad part FMUs within more defined
 2949 drainage catchments as a geographical area. I do not agree with this and consider
 2950 the part FMUs as notified to be the best available approach for spatially applying
 2951 the target attribute states.
 2952

2953 As I mentioned yesterday, I consider that a part FMU should also include the
 2954 downstream receiving environments that it contributes to as well as its own
 2955 boundaries.
 2956

2957 That's me for forestry.
 2958

2959 Chair: Thanks very much Dr Greer. Have you got Mr Cairns' document? He describes
 2960 his further submission to Stream 3 there.
 2961

2962 Greer: I don't but I can get it up.
 2963

2964 Chair: I just want to ask you to comment on the two sentences he's got at the bottom
 2965 of page-6 and the top of page-7, which are just what you're talking about. So,

2966 what if Mangaroa fails but Pakuratahi pass – talking about these activities
 2967 contributing to catchments. My reading of that is I think he’s saying is it actually
 2968 clear when a TAS will be met or not for an activity, if an activity can contribute
 2969 to different catchments? I think that might be what he’s saying.
 2970

2971 Greer: I think what he might be saying, or I think it goes back to that local water quality
 2972 argument and “Does it only apply if you’re in a river which is also not meeting
 2973 the TAS?” and whether you have to reduce to meet the TAS in the downstream.
 2974 That’s how I read that. Regardless of exactly what he meant, my opinion is if
 2975 the catchment is at the bottom **it doesn’t mean** [02.14.21] you will reduce
 2976 regardless of your own local water quality. That’s my understanding of the way
 2977 it works.
 2978

2979 The Whakatikei, Akatarawa and Pakuratahi their median visual clarity is very
 2980 high. I think most of them are over four metres which is thirty percent already
 2981 better than the A state.
 2982

2983 Because it’s a median value that doesn’t capture the losses during rainfall events
 2984 that contribute to the Hutt, which can then be deposited and resuspended. It
 2985 doesn’t factor in their bed load either. So, a river can have very high visual
 2986 clarity but still cause impacts downstream if the sediment is deposited in its
 2987 receiving environment.
 2988

[02.15.05]

2989 Kake: In your rebuttal, and it might come up in the next topic this afternoon in
 2990 earthworks, paragraph 6 and responding to the risks associated with earthworks
 2991 conducted within that five metres of a surface waterbody, I suppose in
 2992 considering what you said about sediment going into a waterbody, those three...
 2993 so, 7.1, 7.2, 7.3 you’ve got those three definitions there.
 2994 I don’t know if the question has been answered with respect to the five-metre
 2995 setback to a surface waterbody; rather that the discussion seems to turn to the
 2996 definition of the watercourse.
 2997

2998 I just wonder if you have thought about that a little bit further.
 2999

3000 Greer: There was two parts I think to the submitters’ issues with it, which was (1) that
 3001 if you’re treating earthworks you’re catching the sediment before it goes into the
 3002 river so you don’t need a setback; and my response to that was, “Yeah, but you
 3003 could undermine the bank if you’re earthworking the riverbank,” so there’s an
 3004 additional risk of working within the setback.
 3005

3006 The other one, Ms Horrocks spent quite a bit of time on it in her evidence and
 3007 was that because it’s around a surface waterbody you have to then determine if
 3008 you’re a surface waterbody and that there is a process by which you need to do
 3009 that; and specifically, whether ephemeral watercourses are exempt from that
 3010 definition. My response to that was simply there are lots of rules already in the
 3011 NRP where you have to categorise the receiving environment or the impacted
 3012 environment and this is nothing new. Nothing new here in Greater Wellington.
 3013 It makes it pretty easy for you to determine what your body is. I just didn’t see
 3014 it as a real impediment to the rule.
 3015

3016 Chair: I’m just looking at Map 79 of PC1 which shows the target attribute state sites
 3017 and the part FMUs. I am just thinking again about Mr Cairn’s question.

- 3018 The first one at the bottom of page-6, that's not correct. What he's saying there
 3019 is does a part FMU now include the downstream receiving area, say Hutt
 3020 Boulcott, if Mangaroa Te Marua fails? It won't, right? Because that's not in that
 3021 part FMU catchment. Am I understanding that correctly?
 3022
- 3023 Greer: Yes, I think it's a little bit backwards that sentence. A part FMU actually should
 3024 include everything upstream of it. Not everything downstream of it. You don't
 3025 fail at the Hutt because you fail in your upstream catchment. You fail in your
 3026 upstream catchment if you fail in the Hutt. It's the opposite way of what he may
 3027 be interpreting it to mean there.
 3028
- 3029 Wratt: Can you just say that again?
 3030
- 3031 Greer: How I envisage it is, if the Mangaroa fails and that's part of the lower main stem
 3032 part-FMU, that doesn't mean that everywhere else that contributes to the lower
 3033 main stem part-FMU fails. However, if the bottom of the catchment does, that
 3034 means that everything upstream fails. It doesn't impact unrelated waterbodies,
 3035 just those upstream.
 3036
- 3037 Chair: So, taking that particular example on the map, Mangaroa at Te Marua is in the
 3038 Te Awa Kairangi urban stream's part-FMU.
 3039 [02.20.05]
- 3040 Greer: Rural main stems and streams.
 3041
- 3042 Chair: Rural streams and rural main streams – sorry. Okay.
 3043
- 3044 Then Hutt River at Boulcott is in Te Awa Kairangi urban streams?
 3045
- 3046 Greer: No, Hutt River at Boulcott is in Te Awa Kairangi lower main stem. Te Awa
 3047 Kairangi lower main stem is very, very narrow. It's only the riverbed. You
 3048 probably can't see it on there, on an A4 map.
 3049
- 3050 Chair: If you don't mind just explaining the link. Is there any connection then between
 3051 those two-part FMUs in terms of... I think what Mr Cairns is saying, if you're
 3052 failing downstream, does that mean that your activities upstream need to be
 3053 managed?
 3054
- 3055 Greer: Yes. I would think that if you failed at Boulcott, which is the lower main stem,
 3056 the part FMUs that contribute to it, the Te Awa Kairangi rural streams, Te Awa
 3057 Kairangi urban streams, the Ōrongorongo [02.21.14] the forested main stems 1
 3058 and part of the Korokoro part-FMUs, I would consider they would all fail if the
 3059 Hutt River one failed.
 3060
- 3061 However, the Hutt River wouldn't fail if it was A state there, but the Korokoro
 3062 didn't meet, or the Hulls Creek didn't meet. That's where the relationship breaks
 3063 down. It's only the Hutt River which impacts whether the other part FMUs are
 3064 failing or not.
 3065
- 3066 There's only one other example of that in the PC1 area and it's the Wainuiomata
 3067 River captures Wainuiomata urban streams as well as its own part FMU, which
 3068 is large, it's not just the main stem.
 3069

- 3070 Chair: The Wainuiomata downstream of White Bridge?
3071
- 3072 Greer: Yes. That captures that Black Creek site too.
3073
- 3074 Wratt: That's just put another thought through my head. So, if you've got a part FMU
3075 that's high up the catchment, that would fail but isn't one of the state of the
3076 environment reporting sites, that part FMU catchment itself doesn't get captured
3077 anywhere really does it?
3078
- 3079 If it's got crap water quality in that part FMU.
3080
- 3081 Greer: Are you referring to a situation where there's a river that's in a bad state but the
3082 site isn't on that river, so it's not getting monitored?
3083
- 3084 Wratt: The monitored site is further down that FMU or part FMU, whatever it is, but
3085 you've one section, one catchment feeding into that that has got really poor
3086 suspended sediment, E.coli or whatever, that's not being captured anywhere in
3087 this.
3088
- 3089 Greer: No, that's what I was talking about yesterday in terms of it captures cumulative
3090 effects at the catchment scale. It doesn't manage... except through the general
3091 conditions around FEPs that require you to operate good practice. Sometimes
3092 there's sensitive small streams that can be degraded from good management
3093 practice farming, especially where there's no requirement for stock exclusion.
3094 Yes, so those aren't covered. If you're meeting all your TAS at the site, that
3095 won't drive local improvements that are the direct effect of a specific land use.
3096 It doesn't work that way.
3097
- 3098 Wratt: I guess it's not intended to. That's got to be deal at a catchment level by a local
3099 community or however.
3100
- 3101 Greer: The old NPS-FM did allow for a more nuanced approach where the target
3102 attribute states could be rolled out everywhere. For example, the Canterbury
3103 Land & Water Regional Plan sets objectives at a river class kind of scale, where
3104 you go we've got this many numbers of different types of rivers and they have
3105 their own foibles which allow differential targets to be set – but the targets do
3106 apply in every single river in that TAS.
3107 [02.25.00]
- 3108 The spring fed plain streams will get a more lenient nitrogen target than the hill-
3109 fed rivers. If you apply for consent and you're discharging to a plain's river you
3110 would still have a target that applied to you.
3111
- 3112 That was changed through the 2020 NPS-FM which specifically required
3113 regional councils to select the sites at which it applies. Because councils don't
3114 have unlimited funds, that really does drive a bottom of the catchment approach
3115 to setting targets and you lose that ability to pull water quality up everywhere if
3116 the bottom of the catchment is not too bad.
3117
- 3118 Wratt: I guess that sort of relates back to the conversation about some submitters
3119 wanting to actually have monitoring at more specific sites. If you did have that
3120 then you actually drive a more rigorous local approach potentially.
3121

3122 I don't know why this has only suddenly dawned on me.

3123
3124 Greer: In my experience though, what happens with those river class specific objectives
3125 is it drives the **monitoring** [02.26.14] cost burden onto the applicant who is then
3126 driven to justify that they're meeting their target attribute state in the primary
3127 receiving environment. The Council doesn't pick up the slack for that. They will
3128 have a representative monitoring network which can tell you in general these
3129 rivers are doing this in relation to targets. When it comes time to get consent you
3130 won't be able to rely on data from a nearby site to prove it. You do end up having
3131 to pay for monitoring when you apply for consent in those areas.

3132
3133 Watson: I guess Issue 14 again is the mapping, which we've spoken about at length – the
3134 maps and the plan and how they integrate with the rules and the provisions. I
3135 don't think there's anything here that we haven't already covered, either today
3136 or yesterday, in the context of the terminology used in the definitions, maps and
3137 addition of guidance or advice note at the bottom of the maps to direct that these
3138 are a guide rather than based on a point in time as well was the other thing.

3139
3140 Is there anything else on these that needs to be covered, or we'll move on?

3141
3142 Again, this was stuff that was covered through Issues 2 and 3 this morning, in
3143 terms of my approach to pull in the operative NRP rules into PC1. I guess the
3144 reason I did that, rather than disapplying the not applicable to whaitua provisions
3145 or ICOMS is that Ms Vivian is recommending that they be retained as PC1
3146 superseding them. So, we would end up in situation where for vegetation
3147 clearance you would end up with permitted activity rules being in the operative
3148 NRP, but the rules when permitted standards are not met being in PC1. So, my
3149 approach for clarity or to make things easier was just to pull the operative NRP
3150 rules into PC1 so they all sit in the same place.

3151
3152 Issues 16 and 17, this is just a summary of the other matters that weren't
3153 specifically related to specific provisions. I touched on this in my slide talking
3154 about the forestry context in summary of submissions. There was a decent
3155 number of submissions in general opposition to forestry. These were either
3156 covering statements or letters or supporting statements and the like that were
3157 submitted alongside the submissions on provisions that just kind of weren't
3158 captured as part of the provision, I guess.

3159
3160 There wasn't anything new coming out in these submissions. It was all stuff that
3161 was coming through in the submissions on the provisions, the main ones being
3162 stringency and concerns about the erosion risk mapping methodology.

3163 [02.30.15]
3164 The one of most relevance probably that wasn't picked up through the provisions
3165 themselves would be the lack of alignment with the whaitua recommendations,
3166 but I kind of addressed that in the context or scene setting slide that I spoke to.

3167
3168 Ultimately, I reviewed all those submissions and all of the submissions as part
3169 of the s42A process. There was nothing in those general submissions that
3170 required any further changes to provisions that I saw.

3171
3172 Then there were a couple of other matters that were raised, which didn't fall into
3173 any other bucket, I guess. China Forestry Group sought amendments to Method

- 3174 44 to be kind of more specific to forestry. The submission was allocated to me
 3175 really late in the piece and I had already drafted non-regulatory methods which
 3176 were consistent with what they were seeking. So, that's covered.
 3177
- 3178 Then there was a general submission about wildfire risk in PC1 and the
 3179 provisions in PC1 not accounting for wildfire risk. I don't think they required
 3180 any recommendations because that's outside the scope of PC1 in my view.
 3181
- 3182 McGarry: Just looking at Method M44(a) do you think that should include mana whenua
 3183 working with forestry sector organisations and landowners?
 3184
- 3185 Watson: I was thinking about this last night actually. I think the involvement of mana
 3186 whenua is better reflected through the forest spatial plan requirement in the RPS
 3187 Change 1 – so Method CC4 which requires a Forest Spatial Plan to be prepared
 3188 alongside mana whenua and key stakeholders. I think that's a better place for
 3189 mana whenua involvement. These non-regulatory methods are more focused on
 3190 I guess how land is managed at a property scale, or more of a property scale, and
 3191 it's more relevant to landowners in the sector and Council as regulators, rather
 3192 than the broader community – in my view.
 3193
- 3194 Kake: The discussion yesterday that we had around Method 44, I think, so not the
 3195 argument that you've made with respect to the sector. I'm just thinking about
 3196 consistency in the Plan Change here now and the proposal from yesterday under
 3197 Method 44 was to include that mana whenua work alongside Councils,
 3198 communities, etc.
 3199
- 3200 I suppose looking at Method CC4, can you just outline what that Method CC4
 3201 includes?
 3202
- 3203 Watson: I don't have that open either unfortunately, but the basis of that method is the
 3204 "right tree right place" ethos. The key requirement coming out of that method is
 3205 for Council to work with mana whenua and stakeholders which includes the
 3206 forestry sector and TAs if they want to be involved on development of a spatial
 3207 plan that identifies where and what sort of forestry is appropriate in specific
 3208 locations. That hasn't been progressed by Council as far as I am aware. So that's
 3209 a pending action on Council as part of that process.
 3210 [02.35.00]
- 3211 Kake: I'm just pulling that up now, just so I'm real clear. That Method CC4 is about a
 3212 spatial plan identifying areas where forestry should and shouldn't take place?
 3213
- 3214 Watson: Correct.
 3215
- 3216 McGarry: I guess the bit that I was focusing on was (d) that if it's a non-notified and
 3217 thinking about what Mr Pepperell said about still getting feedback from mana
 3218 whenua. And, if going forward there was development of standard conditions
 3219 for operations that mana whenua were comfortable with, they might not need to
 3220 have involvement in applications going forward, is where I was sort of thinking
 3221 that this could be an appropriate place. I guess if (d) wasn't there I would sort of
 3222 accept what you're saying, but because that standard consent conditions are
 3223 there I do wonder if a bit more thought about that is warranted.
 3224
- 3225 Watson: That's probably something that I would need to come back to you on.

- 3226
3227 Kake: I'm trying to find the method and my computer is about to crash. I wonder if we
3228 can get a response to that once you've had a little bit more thought. Thank you.
3229
- 3230 Chair: Does that cover Issues 16 and 17? Yes. Great.
3231
3232 We're at definitions.
3233
- 3234 Watson: It's definitions now. I guess there's nothing material that again we haven't
3235 already discussed in here. A lot of it is amendment to align with the NES and
3236 removal of terms that are no longer used in the plan. Amalgamation of the
3237 highest erosion risk land the potential erosion risk land. I guess minor
3238 amendments to support implementations, so just providing clarity for plan users.
3239
- 3240 Then there's some new definitions again that have been brought in to assist plan
3241 implementations; so, pulling through commercial forestry and commercial
3242 forestry activity definitions from the NES. Likewise, new definitions for exotic
3243 continuous covered forestry and indigenous forest. A new definition for forestry
3244 management plans. That was included in my S42A recommendations but has
3245 changed substantively as part of rebuttal in response to submitter evidence.
3246
- 3247 A new definition for freshwater management unit which was a throwaway
3248 comment from one of the submitters on the vegetation clearance rules – sorry, it
3249 might have been on Schedule 33 actually, but it was a good point that PFMUS
3250 and part freshwater management units seems to be defined, but freshwater
3251 management units aren't in PC1.
3252
- 3253 Then the new definition for potential erosion risk land, again it was discussed
3254 over the last couple of days.
3255
- 3256 I guess moving on, just to recognise there's a difference in approach between
3257 vegetation clearance and forestry. Just wanting to draw on that a little bit.
3258
- 3259 There's no available technical evidence or other evidence from Council about
3260 the scale of vegetation clearance. It's not a best available information test in that
3261 situation. There is no information available to work out the scale of the problem
3262 and what the response might need to be. Whereas for forestry, as you've heard
3263 today, there is an evidence base. There's some work that has gone into
3264 evaluating the scale of the problem and its impacts on water quality and
3265 alignment with objectives in PC1 and the NPS-FM.
3266
- 3267 [02.40.00]
3267 Chair: [Inaudible – issue with mic]
3268
- 3269 Watson: I wasn't envisaging that the requirement would involve additional I guess plan
3270 to be prepared. It was kind of assessing the actual risk of erosion at a property
3271 scale as part of a field assessment. I guess the forestry operates in a different
3272 way to the kind of ongoing or enduring discharges of pastoral land. There is only
3273 so much you can do to minimise sediment from forestry activities as they're
3274 occurring. It's all about the managing of those activities at the time and that risk
3275 of vulnerability after, which comes back to the appropriateness of controls,
3276 methods and measures to manage sediment risk. I guess the intent of that
3277 Forestry Management Plan requirement to confirm actual risk of erosion and

3278 respond to that risk of erosion in a way that allows that activity to be undertaken
3279 in a way that would create no more effects than it would if it wasn't on that
3280 potential erosion risk land kind of manages that kind of heightened risk.

3281
3282 It's bringing the risk back to all things being equal, I guess. That was the intent
3283 rather than an additional requirement for more refined mapping or identification
3284 of areas. It was just kind of recognising these areas exist on the ground, or are
3285 you seeing - are there obvious signs that this an area that is going to require a
3286 specific response, and what does that response look like? That comes through as
3287 part of that Forestry Management Plan process.

3288
3289 I didn't envisage it being that kind of prescriptive. I guess as part of that process,
3290 if you're doing your ground-truthing properly you would be identifying any kind
3291 of erosion risk land or areas that you'd want to avoid or manage in a specific
3292 way to I guess best manage your risk of discharges and potential enforcement
3293 and compliance issues ultimately.

3294 I guess it's more a case of having particular regard to that potential erosion risk
3295 mapping, because that's already been identified, so that work has already been
3296 done for you.

3297 [02.45.10]

3298 That's already an area that's going to be at higher risk and that's not meaning
3299 you can put aside every other potential area on your site that might not be on the
3300 mapping. But, if you look at very obviously, you should probably be steering
3301 clear of it, or you're going to have some pretty innovative ways of controlling
3302 risk in that area.

3303
3304 It just kind of comes back to information provided in support of the Forestry
3305 Management Plan in terms of is there enough information to understand those
3306 risk at the scale that's required?

3307
3308 You'll be pleased to know this is my last slide – I'm sick of hearing the sound
3309 of my own voice.

3310
3311 I guess as a summation the remaining matters of contention that are seemingly
3312 unresolved, I would expect based on submitter evidence and discussion today,
3313 is the implementation approach for the application of the TAS, which recognises
3314 that Council needs to do more work to iron out the machinations of that approach
3315 and how it's going to be reported and implemented.

3316
3317 I guess the evidence base for the stringency test, alongside the alignment with
3318 the NPS is again polarising views. The forestry sector will tell you that the NES
3319 is perfect – not perfect but is good enough to do the job you're trying to do here.
3320 Adding additional costs for no additional benefit the outcomes are going to be
3321 the same. Then Forest & Bird and EDS are going to be coming at it from an
3322 approach where it's too lenient and we're not doing enough and NPS-FM is not
3323 going to be met.

3324
3325 I recognise that. Ideally, I would like more nuanced or focused rules. The scale
3326 of activities and regulators is important. At the moment it kind of captures
3327 everything where TAS isn't met. I don't necessarily agree with that, but the
3328 evidence base I've had, as I've pointed out through my rebuttal evidence and in
3329 discussion today, I haven't been given a magic number or anything as to what

3330 that might look like, or what that needs to look like - particularly given the NES
 3331 requires a management plan for any earthworks over 500 square metres in a three
 3332 month period; whereas PC1 allows earthworks up to 3000 square metres as a
 3333 permitted activity with no management plan requirements sitting underneath
 3334 them.

3335
 3336 There is I guess an equity or fairness issue in that space that kind of needs to be
 3337 resolved, particularly for earthworks and vegetation clearance. I don't think it's
 3338 necessarily appropriate to require consents for all of those activities regardless
 3339 of scale. There needs to be some sort of threshold applied. I haven't been able
 3340 to get to a point where I could kind of say what that should be, I guess.

3341
 3342 Then, I guess a final remaining matter of contention is around the erosion risk
 3343 mapping and is that certain enough to be used for rules or does it just kind of sit
 3344 in a policy space guiding – uses guidance or identification of areas that require
 3345 further assessment rather than more of a blunt tool.

3346
 3347 If the erosion risk mapping was considered certain enough you would be able to
 3348 develop or recommend more specific rules. You would be able to narrow it down
 3349 to potential erosion risk land and where TAS are not met for example, so you're
 3350 kind of narrowing the number or reducing the number of forestry activities that
 3351 might be caught by rules in PC1, whether that's appropriate or not.

3352
 3353 [02.50.00]
 3354 Chair: Is there any trigger for non-regulatory action? I can't see it in Methods 44(a) or
 3355 (b), where there is potential erosion risk land but the TAS is met? Is there any
 3356 trigger that might support non-regulatory... so, Mr Pepperell and team getting
 3357 out there and looking at the forestry operator and seeing what more could be
 3358 done on their land to manage sediment risk, even though the TAS is met?

3359
 3360 Watson: The non-regulatory methods apply everywhere, so that's not just where TAS are
 3361 met. Particularly in Method M44(a) from memory I've left it deliberately broad.
 3362 I haven't tied it to potential erosion risk land. The method requires Council to
 3363 work with the forestry sector to identify areas with forestry that are at greatest
 3364 risk of effects, whether that's erosion prone land or some other kind of factor
 3365 which elevates the risk of effects. For example, TAS is not being met and the
 3366 proportion of sediment load coming from forestry in that catchment is high.
 3367 Then Council can work to prioritise responding to those higher risk areas,
 3368 because obviously money only goes so far.

3369
 3370 A lot of these mechanisms are in place for rural land use already, but there's
 3371 nothing in place for forestry. There's going to be a bit of work to do to get this
 3372 off the ground and set up. Probably a bit of, it's fair to say, relationship mending
 3373 with the forestry sector after PC1.

3374
 3375 There is I guess a timing issue associated with all of this. In short, the non-
 3376 regulatory methods apply everywhere and it allows the forestry sector and
 3377 Council to work together to identify the higher risk areas, and the best way of
 3378 managing the approach to ensure that sediment impacts are reduced in those
 3379 higher risk areas. That's the intent.

3380

- 3381 Chair: Thank you, that's really helpful. No doubt Mr Pepperell and his team are up to
 3382 those challenges. Thank you. Does that bring us to the end of the forestry
 3383 provisions? It does and we are only slightly over Mr Ruddock – you will be
 3384 perhaps relieved.
 3385
 3386 Ms Vivian are you ready? Thank you. We've taken a long time to get to your
 3387 report. We are ready.
 3388
 3389 Vivian: Thank you. We all know why we are here and I am not going to go over that
 3390 today, but I just thought I would highlight the key difference between earthworks
 3391 and the approach in comparison to forestry and rural land use.
 3392
 3393 I guess the first thing I want to mention is we know that open earthwork sites
 3394 can contribute high loads of sediment to freshwater bodies – it's just really hard
 3395 to determine that contribution, considering the open extent across catchments
 3396 changes so variably and we have very limited control over when that is going to
 3397 occur once we have granted consents.
 3398
 3399 The other thing that I would like to highlight really is that these PC1 earthwork
 3400 provisions aren't necessarily new or significantly more restrictive than the
 3401 existing requirements under the NRP. While they appear new, in my opinion
 3402 what it actually does put into the rule and policy framework is what we already
 3403 impose by consent conditions, and all of those consent conditions are really
 3404 standard, including the winter works close-down period and the discharge
 3405 standard largely –and when I say standard conditions, almost every single
 3406 earthworks consent that I have seen being granted has had those conditions on
 3407 there.
 3408
 3409 For a little bit of context, up until April I worked with a regulatory department
 3410 in the land development team largely processing land development consents
 3411 with earthworks and stormwater permits. I have a thorough understanding of
 3412 how those NRP provisions worked and the complications we've seen having to
 3413 implement the PC1 as it's notified over the past 18th months.
 3414 [02.55.15]
 3415 The PC1 earthworks provisions what they really will do is provide certainty
 3416 around what's acceptable to Council in those earthworks applications and
 3417 provides plan users with direction for what's expected and how those
 3418 expectations can be met.
 3419
 3420 Chair: Sorry to interrupt Ms Vivian. I was looking in the operative plan before to just
 3421 try to see what these winter works or close-down periods and I couldn't find
 3422 them. I don't think they use the word winter. Could you just talk through what
 3423 the provisions and what they currently require.
 3424
 3425 Vivian: I do have a whole issue on it a bit further down if you want me to hold off,
 3426 otherwise I am happy to answer questions as we go.
 3427
 3428 So just a little bit more of a general overview – 449 submissions received and
 3429 762 further submissions. While they varied largely they all were tied down to
 3430 four key themes, the first one being the updated earthworks definition that came
 3431 in from the National Planning Standards; the second one being the policies and
 3432 the consequential rule frameworks to provide direction on the management of

3433 earthwork sites; a discharge standard; and that winter close-down period which
3434 I am sure we will discuss at length.

3435
3436 I thought I would just quickly touch on Issue 1 categorisation. I agree with what
3437 was notified in terms of the categorisation of these provisions; however, I just
3438 wanted to point out that through my recommended amendments I have inserted
3439 the wording “and associated discharge” into the permitted activity earthworks
3440 rules. That would move these provisions into the Schedule 1 process.

3441
3442 I know we have talked about how far we take this discharge to coastal waters
3443 idea. I think something I would want to pinpoint here is that when we are looking
3444 at earthworks particularly within Wellington City for example, a large majority
3445 of those streams are all piped. That treated stormwater or treated sediment laden
3446 water, once it's discharged to the network for example, is going straight to
3447 coastal waters. It is not entering freshwater again before it exits.

3448
3449 I just think that’s something important to keep in mind, even when we are way
3450 up in the hills in some of these locations.

3451
3452 Moving onto Issue 2, the earthworks definition, this is probably the one that
3453 caused lot of controversy in submissions. The previous earthworks definition
3454 under the Natural Resources Plan had a long list of exclusions of activities that
3455 weren’t considered earthworks. As a result of that those activities weren’t even
3456 subject to the rule framework, whether or not they resulted in a disturbance of
3457 soil.

3458
3459 By taking on the National Planning Standards definition of earthworks, it has an
3460 unintended impact on those activities. So, when that new definition was drafted,
3461 I don’t think there was enough consideration given to where those activities sit
3462 within the rule framework. As a result, a significant number of those activities
3463 automatically couldn’t meet the permitted activity standards and were pushed
3464 into seeking resource consent for them to be undertaken.

3465
3466 A significant number of submissions were received particularly from the
3467 Territorial Authorities and large infrastructure companies talking about the
3468 effects that was going to have on them in terms of cost and just the amount of
3469 resource consents they would have to seek to be able to undertake their activities.
3470 For example, that’s talking about roading, maintenance of roading, the airport
3471 fixing up parts of the runway.

3472
3473 Again, I don’t think that was the intent when drafting PC1. I think it was a bit of
3474 an oversight.

3475 [03.00.00]

3476 A large majority of submitters asked for a consenting pathway to be provided
3477 for those activities and there were a few who just sought for the original
3478 definition to be either put back in or for these activities to be re-entered into the
3479 existing new definition.

3480
3481 What I decided was through my s42A recommendations was for a new permitted
3482 activity rule to be inserted and provide a consenting pathway for these activities.
3483 I have just listed some of them there. Again, those are the kind of activities that
3484 now we’re going to push into that consenting space.

3485
 3486 In my opinion these activities are all linked. A large majority of the time they
 3487 are minor in scale and so they can be undertaken in a manner in which
 3488 disturbance of soil is minimised, especially when they're undertaken
 3489 appropriately. A lot of them are linear. I just do want to also note that not all of
 3490 the exclusions previously included in that Natural Resources Plan definition
 3491 have been included in this rule and that's because in my opinion some of those
 3492 works should be able to be undertaken in accordance with the new permitted
 3493 activity rule anyway. For example, that's things like disturbance related to the
 3494 construction of a geo technical bore. There is no reason that can't be done in
 3495 accordance with the permitted activity rule. The same as domestic gardening for
 3496 example. If you're exceeding 3000 square metres of gardening, that's not
 3497 domestic at that point.
 3498

3499 So not all of them were included. I just thought I would also point out here that
 3500 through my rebuttal evidence and submitter evidence that came through I have
 3501 also added in the repair sealing or resealing of a road or footpath or driveway.
 3502 That came from submitter evidence from the Porirua City Council and the Upper
 3503 Hutt City Council who again raised concerns that this was going to have
 3504 significant impacts on their everyday activities and maintenance of their assets,
 3505 and I think that by not including the bottom there was an oversight from me
 3506 when I drafted that rule. I think it's important that that one is included in that set.
 3507

3508 That's the end of that issue if you have any questions.

3509
 3510 Chair: Just looking at your Rule R22.

3511
 3512 Vivian: Is that A or the original one?

3513
 3514 Chair: The original. We've obviously been talking about forestry. So, where
 3515 earthworks are permitted if they're to implement an action in Erosion Risk
 3516 Treatment Plan for a farm, or to implement an action in a Farm Environment
 3517 Plan, is there any option or usefulness in including in here earthworks that might
 3518 be needed as a result of a Forestry Management Plan, where they are at the minor
 3519 sort of end to create... I think we have seen in Ms Strugnell's evidence for
 3520 example, or submission, some images she's included of sediment measures. So,
 3521 if earthworks were required to create those, is there any potential that they could
 3522 be captured in the permitted activity rule?
 3523

3524 Vivian: The way that the earthworks provisions are currently drafted, any earthworks
 3525 relating to those forestry rules aren't captured by this earthwork's definition, and
 3526 so those rules wouldn't capture forestry related earthworks. They're all captured
 3527 by the NES for commercial forestry.
 3528

3529 Chair: Either the NES or if it's in a catchment where the TAS is breached it could
 3530 require RD consent under these provisions.

3531 Vivian: Yes, under the forestry provisions, yes.

3532 [03.05.00]

3533 Chairs: Issues 1 and 2 we have covered. I think we are good.

3534
 3535 Vivian: Moving on to Issue 3, this is regarding the management of earthworks sites. PC1
 3536 as notified included a new policy relating to the management of earthwork sites

3537 and that required the use of best practice erosion sediment control measures. It
 3538 also included the new rule framework for earthworks.

3539
 3540 The most important thing here that I want to highlight is at notification
 3541 earthworks undertaken as a permitted activity no longer included a provision for
 3542 any associated discharge of sediment laden water.

3543
 3544 I note that while this rule didn't originally intend for any associated discharge,
 3545 from my experience working with those within the earthworks industry and
 3546 processing resource consents, it is near impossible in some circumstances to
 3547 have no discharge whatsoever from those earthwork sites, even when operating
 3548 in accordance with those best practice guidelines. Even most erosion sediment
 3549 control devices are designed to manage discharges, especially during those high
 3550 rainfall events and allow for a discharge.

3551
 3552 A number of submitters, mainly contractors and earthworks industry experts
 3553 raised serious concerns about the practicality of them even being able to attempt
 3554 to meet these policies and they were concerned that really they would be able to
 3555 provide no reassurance to themselves that they would be able to meet that
 3556 permitted activity rule, and that they were going to then be required to obtain
 3557 resource consents just in the absence of certainty regarding compliance and that
 3558 they wanted to be compliant.

3559
 3560 Through my s42A recommendations I recommended that the policy and the rule
 3561 framework is updated to provide for an associated discharge and acknowledge
 3562 that there is likely to be a discharge even when operating under best practice
 3563 guidelines.

3564
 3565 Consequently, I also had to make an amendment to that policy just to recognise
 3566 that at the time of s42A recommendations I put the words "uncontrolled soil" in
 3567 there. However, upon reading submitter evidence in particular and some
 3568 suggestions from those submitters I've made further amendments to refer to
 3569 maximising the retention of disturbed soil. I think that will provide clarity for
 3570 plan users, that it is soil that has been disturbed as part of those earthworks, as
 3571 opposed to all uncontrolled soil onsite.

3572
 3573 That's the end of that one as well if you have any questions.

3574
 3575 Chair: I see in the amendments that you've tabled today there is an addition here as you
 3576 give effect to relief sought by Winstone Aggregates I think under P29 and P27.

3577
 3578 Vivian: Yes, that will be covered in a further issue.

3579
 3580 Chair: Can I just ask something about the categorisation? As I understand it, you're
 3581 recommending that Rules 23 and 22 to whatua are categorised at P1S1 if your
 3582 changes are accepted.

3583
 3584 Vivian: Correct.

3585
 3586 Chair: Rule 24, earthworks restricted discretionary, that's a freshwater provision?

3587
 3588 Vivian: No, I think off the top of my head that's a...

- 3589
3590 Chair: [03.09.23]
3591
3592 Vivian: Yes.
3593
3594 Chair: There were a few submitters that supported the wording of “uncontrolled” in
3595 P29 and P27 – uncontrolled soil. I think your rebuttal wording of “disturbed
3596 soil” seems logical. The natural meaning of both those words seems quite
3597 different. Are you able to talk a little bit more about that and the change you’re
3598 recommending?
3599 [03.10.12]
3600 Vivian: Yes of course. Uncontrolled I originally put in there with the intent that it
3601 covered sediment that wasn’t put through erosion sediment control measures.
3602 That was the reasoning behind that. I did have even at the time slight concerns
3603 that it wasn’t specific enough and through rebuttal I just thought that those
3604 amendments refined that and made it clearer.
3605
3606 I think as well, must on top of that, those who supported the word “uncontrolled”
3607 I think that was based on before disturbed was put in there and they were just
3608 supportive of an amendment to ensure that it wasn’t covering all discharges.
3609
3610 McGarry: Listening to what you’re saying, it sounds like you’re trying to avoid direct
3611 discharges to surface waterbodies.
3612
3613 Vivian: Yes, correct.
3614
3615 McGarry: Without going through a treatment device.
3616
3617 Vivian: Sorry, could you repeat that?
3618
3619 McGarry: Without going through a treatment device. So, you’re wanting some kind of
3620 treatment system. You’re trying to avoid direct discharge to the surface
3621 waterbodies, isn’t it?
3622
3623 Vivian: Yes, correct.
3624
3625 McGarry: Could we just say that? Because I find (a) even more confusing now, maximising
3626 the retention; and then I tried to think of ways that we could turn that around to
3627 minimising the discharge. But actually, what we are trying to say is you’re trying
3628 to enable associated discharges as long as they have a minor effect as a permitted
3629 activity, and so really, you’re avoiding direct discharges to surface water without
3630 implementing some of these erosion sediment control mechanisms.
3631
3632 Vivian: That could be potentially reworded to make it clear as you said.
3633
3634 McGarry: Then the way to achieve that, I’m just wondering if that’s just a bit muddled. If
3635 the sediment discharge from earthworks were minimised by avoiding direct
3636 discharges to surface waterbodies, some of the ways that you would do it would
3637 be limiting the amount of disturbed land and designing and implementing.
3638
3639 I just wonder if we’ve got a little bit complex in the (a).

- 3640 Vivian: Yeah, I agree. I have looked at that clause multiple times and kind of bounced
3641 around how to make it clear that we are acknowledging that it's not possible to
3642 retain all of that soil onsite, while not providing too much lenience to accepting
3643 that. There may be some direct discharges, I think. Direct discharges are easy to
3644 avoid.
- 3645
3646 McGarry: Because even when I got to the rules, I got a little bit confused about enabling
3647 to water and onto land and circumstances where I enter water and I'm thinking
3648 actually you really want them all to land don't you, and then they will eventually
3649 end in water. You're wanting some kind of control in treatment.
- 3650
3651 Vivian: Prior to, yes.
- 3652
3653 McGarry: So, there's no actual direct discharge to water as such is there. The point you
3654 lose control will probably be on land after your treatment device.
- 3655
3656 Vivian: Correct.
- 3657
3658 McGarry: I just wonder if we could just take a step back and simplify.
- 3659
3660 Vivian: I can definitely try and make some changes and come back to you.
- 3661
3662 Wratt: Your clause (b) limiting, and you've added "to the extent practicable" the
3663 amount of land disturbed at any time. That's policies WH.P29 and P.P27 clause
3664 (b) limiting to the extent practicable the amount of land disturbed at any time. I
3665 think that was in response to a Wellington Airport submission.
- 3666
3667 I'm not convinced that "to the extent practicable" is necessary. It doesn't say no
3668 disturbance of land, or amount of land can be disturbed. It says "limiting". Do
3669 you really think it needs to the degree "to the extent practicable"? There are
3670 times when I agree that "extent practicable" is needed but it's nice not to use it
3671 unless it's needed.
- 3672
3673 Vivian: I would agree with that. When I was writing my rebuttal evidence, I reading it
3674 thought that limiting was enough, but I didn't see a reason why to the extent
3675 practicable in providing the relief that Wellington International Airport thought.
3676 I didn't have a reason I guess to not accept that. I can't remember the exact
3677 wording of their submitter evidence off the top of my head. I could bring it up.
- 3678 [03.15.15]
3679 I don't necessarily think it's crucial to include that wording in there. I don't know
3680 whether it provides any further benefit. You're right in that limiting doesn't
3681 imply that it must be limited to the nearest extent possible.
- 3682
3683 Wratt: The notes I made were that her concerns were that in dealing with infrastructure,
3684 limiting the extent of land disturbance is not always practicable. That's true, but
3685 all it says is limited.
- 3686
3687 Vivian: I think by limiting the extent you're taking into consideration the circumstances
3688 of what you're building or what not anyway, so that would be taken into
3689 consideration and you were limited to that degree.
- 3690 Wratt: I guess my concern is that as soon as you add in "to the extent practicable" you
3691 do open the door for whatever.

3692
3693 Vivian: Yes, I agree. I could envision it being something that me reading it would say
3694 they would need to justify that they have limited it to the extent practicable, but
3695 I think in reality when processing consents maybe that wouldn't be pushed for,
3696 or it would be kind of overlooked quite often.
3697
3698 Wratt: Would you reconsider whether you put that in?
3699
3700 Vivian: Yes.
3701
3702 Wratt: Thank you.
3703
3704 McGarry: Just going to make the same point. I guess what you're trying to achieve there is
3705 to leave the discretion for the decision-maker as to whether there's a limit is
3706 appropriate to replace or not in the circumstances, isn't it? So, it's just a roadmap
3707 really to limit where necessary.
3708
3709 Vivian: Yes.
3710
3711 McGarry: I'll come back on that and have a bit more of a think about it.
3712
3713 In terms of (d) and it gets back to if we had a different chapeau, but the
3714 importance in (d) you've captured everything there, but I just wonder about
3715 making sure they're effective. Because at the moment you just maintain and it
3716 could be a dog that you're maintaining. It might never work. I just wonder
3717 whether it could be ensuring those controls are effective and maintained... they
3718 really need to be inspected as well. To me that's one of the fall-downs in the
3719 whole system, is that people put things in and then they don't go back and inspect
3720 them. I know this isn't a rule and it's getting quite specific, but I think the point
3721 is at the policy level that the device is there and it's effective, and it's effective
3722 for the whole period.
3723
3724 Vivian: Yes, I agree. I think to some degree if it weren't operating effectively that would
3725 indicate that it's not being maintained, but I agree that the word "effective" could
3726 be placed in there for clarity and for us to be able to go back to the operator and
3727 state that they're not aligned with that policy.
3728
3729 McGarry: I totally agree, but I have seen devices that have never worked from the day they
3730 were put in.
3731
3732 Vivian: Me too.
3733
3734 Chair: Ms Vivian, we are not at the point of looking at R24 and asking questions about
3735 that are we?
3736
3737 Vivian: No.
3738
3739 Chair: I shall wait.
3740 Vivian: The next issue is related to the discharge standard. We're all aware that the NPS-
3741 FM has brought in this mandatory contaminant attribute subject to a limit, and
3742 so at the drafting of PC1 the target attribute state for TSS was used as the
3743 discharge standard.

3744
 3745 I think the most important thing that I want people to take away from this is that
 3746 TSS just really isn't practicable to be used as a measurement on earthwork sites
 3747 in particular. That's largely because to determine TSS that sample has to be
 3748 taken. It gets taken to a lab and then depending on the lab and depending on how
 3749 busy they are, it might even take a couple of days for that result to get passed
 3750 back to Council or the contractor that's send the sample away.

3751 [03.30.30]

3752 That was raised by a number of submitters.

3753
 3754 In my s42A recommendations one of the most significant changes was the
 3755 change from using TSS as a unit of measurement for that discharge standard and
 3756 referring to NTU as a measure instead. NTU was recommended to be used as an
 3757 alternative measurement for suspended sediment. I just want to highlight that
 3758 TSS measurement can still be imposed as a condition of consent.

3759
 3760 As a matter of discretion Council has the ability to impose any of the monitoring
 3761 and reporting requirements from those sites as a condition of consent.

3762
 3763 So, while NTU is an appropriate measure to be used onsite, I still think it's
 3764 important that those granting resource consents for earthworks impose TSS
 3765 measurements to be taken.

3766
 3767 That's particularly in those part FMUs where either winter works is occurring
 3768 or where the target attribute state for suspended sediment isn't being met.

3769
 3770 I'm assuming there will be a couple of questions on that. I might stop there.

3771
 3772 McGarry: I just wonder advice you had from the science team on this. My understanding
 3773 is NTU and TSS is a correlation relationship and that you need quite a bit of data
 3774 for, and it's site specific to the receiving waters. So, I'm a little confused by this
 3775 and I'm a little confused where it's come from – where that 170 is from.

3776
 3777 I guess if it was a discharge standard on point of discharge, I wouldn't be so
 3778 concerned, but when you start talking about receiving waters then you need to
 3779 know what the receiving waters... what the correlation of that NTU means.

3780
 3781 I'm just a little unsure and I don't know how this fits with the NRP at the moment
 3782 and whether this is a method used. I understand exactly what you're saying that
 3783 the best way to measure it is NTU and I've got no problem with having a
 3784 standard, as I say, on the discharge quality but I'm just not sure how this works
 3785 in the real world.

3786
 3787 Vivian: Do you want to comment on that Michael?

3788
 3789 Greer: The point of the TC standard with the initial discussions were not to limit a load
 3790 to the river but actually make sure that the ponds are high performing. We tried
 3791 to get a lot of information from various people about what a pond can do, and
 3792 what standard we should put on a pond so that we can certain it's operating well.
 3793 We are not actually trying to achieve a specific outcome in the river. It's about
 3794 making sure that the pond is working well and they'll have to floc it. We really
 3795 couldn't get that number for TSS out of anybody.

- 3796
3797 I've done a bit of working looking at them through Auckland and you can get
3798 some numbers. The hardest thing with a TSS standard, and it also applies to
3799 NTU as well, is the point at which you should stop applying it. Because ponds
3800 will start flowing through. You can't meet a TSS standard at all times. That's
3801 just not how sediment retention ponds work.
3802
- 3803 We couldn't get a number. Ultimately the PA standards for minor discharge was
3804 adopted. We know that's not appropriate for a pond. They'll meet it most of the
3805 time. They can get down to three or four milligrams a litre when they're flocc'd
3806 but they'll start increasing as they flow through more and 100mg is quite low.
3807
- 3808 Basically 170 NTU is the pond performance standard that is applied to a lot of
3809 discharges in the Wellington region already. I don't know where that number
3810 has come from. No-one has ever really been able to tell me the number.
3811
- 3812 Earthworks experts who the Council use for consents say it's a pretty good
3813 indicator when the pond is working well. In terms of in the receiving
3814 environment, the only reason that NTU was applied in the receiving
3815 environment is to make it line up with the discharge standard. There's no point
3816 in having a lower NTU than the receiving environment you're discharging into
3817 because you know you won't have a conspicuous change of visual clarity at that
3818 point. So, it's just about lining them up rather than having a specific instream
3819 outcome at the end of the pipe, which that's managed through the conspicuous
3820 change in visual clarity requirements of the rule.
3821
- 3822 McGarry: I accept that. You often see 100 grams per cubic metre as a standard for a
3823 dewatering operation. Then when you get to clause (a)(1) it goes back to what
3824 you were just talking and as you say the zone [03.26.45] mixing and it's 100
3825 grams per square metres. Should that be NTU there as well?
3826
- 3827 Greer: Yes. They should be lined up. I believe that Ms Vivian had done that through
3828 most of the rules. I think this one that just got off the radar.
3829
- 3830 McGarry: I'm just trying to imagine how you would do this. I understand exactly what
3831 you're saying at the end of the pipe. That is a pretty normal sort of standard. I'm
3832 just not sure how you would then apply it to the receiving waters. Maybe it's just
3833 the wording that's just not quite there. I'm just not sure.
3834
- 3835 As I say, if it was an end of pipe standard, except the first bit.
3836 Greer: I would imagine that when you're doing your monitoring or the Council comes
3837 knocking on your door and does the monitoring, the drop it to a metre in the
3838 receiving environment. If it's above/below 170 they go to the discharge and take
3839 a measurement. If that's above 170 then they're obviously not meeting the rule.
3840 That would be the test. If the receiving environment is above 170, they would
3841 be looking at a conspicuous change in visual clarity upstream and downstream
3842 to look at effects. It's going to be pretty difficult obviously when you're
3843 discharging into the pipe stormwater network and your receiving environment
3844 may be many kms away. I don't know how to tackle that issue. But when they're
3845 going straight to a stream that's how I envisage that working.
3846

- 3847 McGarry: Clause 2 I get even more concerned because coastal waters, that NPU
3848 relationship takes quite a bit of data to make that correlation.
3849
- 3850 I wonder if the way around is that if you do exceed the 170 NTU in the discharge
3851 standard, that that then requires that you do some kind of visual clarity black
3852 disk monitoring in the receiving waters and just have the percentage decrease as
3853 the receiving water standard.
3854
- 3855 Greer: Again, that deals with direct effects but it doesn't drive the good pond
3856 performance. They should just be not allowed to operate under this rule above
3857 170, except where the background concentration already exceeds that. So that's
3858 basically saying, during high flows where your natural concentration is 170.
3859
- 3860 Once the correction is made to remove... that coastal one is going to be tricky.
3861 Are you going to change that to NTU, the coastal one?
3862
- 3863 Vivian: That was supposed to be pulled through. That coastal one was inserted following
3864 submitter evidence who raised the issue that it's not appropriate to use NTUs in
3865 measure in coastal waters.
3866 [03.30.00]
- 3867 Greer: It's almost I don't think that's going to work doing an NTU discharge standard.
3868 I agree with you on that one. But I also don't think necessarily a TSS standard
3869 is going to work in a lot of coastal environments as well given how much sand
3870 is resuspended by wave action close to the coast. You only have to go to Petone
3871 on a windy day to know that it's way above 100mg a litre in the surf zone. The
3872 coastal zone and reasonable mixing zone is only 15 metres, so it's not like you're
3873 way out there where you've got to do that assessment.
3874 McGarry: It's just not going to work.
3875
- 3876 Greer: No.
3877
- 3878 McGarry: In coastal waters I'm just wondering are there circumstances where it would be
3879 after reasonable mixing that you would be in coastal waters, or are we trying to
3880 cover everything? It would probably be quite an exception, wouldn't it?
3881
- 3882 Greer: Just from a scientific perspective the mixing zone in the NRP is sufficiently tight
3883 at 15 metres that you could potentially rely on a conspicuous of visual clarity as
3884 being the sole measure of performance for the discharge in retrospect.
3885
- 3886 McGarry: That's where I was sort of heading towards. I think you just need in the receiving
3887 orders there so that it would be "in coastal waters will not result in conspicuous
3888 change, in colour or visual clarity in the receiving waters," after reasonable
3889 mixing. It's missing that.
3890
- 3891 I've probably said enough. NTU and the coastal environment...
3892
- 3893 Greer: Just quickly though, in terms of the definition of a conspicuous change in visual
3894 clarity, I'm not entirely sure if Greater Wellington has one for the coast. They
3895 have a black disc measure for the river – you will see the 33 and 20. As far as I
3896 know, maybe there isn't a standard one for the coast. That might require a bit of
3897 implementation guidance to let people know what that means.
3898

- 3899 McGarry: It could just be a conspicuous colour change, which are made much more easily
3900 observable for a monitoring officer.
3901
- 3902 Vivian: I see no issues with that. I think it's clear that Michael and I might need to sit
3903 down and work out a few redrafting issues here. I acknowledge your concerns.
3904
- 3905 Chair: Ms Vivian, do you think that's an appropriate place to stop for the break? Have
3906 we finished Issue 4 from your perspective?
3907
- 3908 Vivian: Yes, I think that's an appropriate place to stop.
3909
- 3910 Chair: It might even place us ahead of time Mr Ruddock. If we come back in twenty
3911 minutes at 3.50pm. Thanks.
3912
- 3913 [Afternoon Break – 03.33.35]
3914 [Hearing Resumes – 03.54.36]
3915
- 3916 Chair: Kia ora everyone, we'll start again. Thank you very much. We are in the last
3917 session with the Council team. Ms Vivian, we have got a couple more issues or
3918 maybe just one more issue with you to talk through. Please, over to you.
3919 [03.55.00]
- 3920 Vivian: Thank you, Commissioner. The next issue is regarding the winter shut down of
3921 earthworks. Just in reference to your question earlier though Commissioner
3922 Nightingale, would you like me to give you a quick rundown about this process
3923 in general under the NRP beforehand?
3924 You're right, there is no reference in the NRP to the winter shutdown, in fact
3925 there's very limited policies throughout the entire NRP in relation to the
3926 management of earthworks.
3927
- 3928 That shutdown period is just an extended condition of consent that's placed on
3929 all of our earthwork's consents. In the three and a half years that I've been at
3930 Greater Wellington I think I can think of two consents that have been granted
3931 from the get-go without that condition and that's usually related to smaller
3932 earthwork sites who have pre-programmed what they are required to do over the
3933 next year and they know that there's going to be a certain aspect that they must
3934 do during that period and they've provided reasoning as to why that's
3935 appropriate, and how they've considered the risk during that period.
3936
- 3937 Outside of the consenting process, the conditions that get placed on resource
3938 consents are usually a flat, "Your site must be stabilised during the period of
3939 xyz." If it would assist the panel, I could get some examples of those conditions
3940 provided to you guys, if that would be helpful. But, outside of that condition
3941 that's placed on resource consents, there is a messy process that happens every
3942 year that we call the 'Winter Works Approval Process'. Without going into
3943 incredible detail, what happens is we get to a point in the year and consent
3944 holders who wish to undertake works over the winter period essentially have to
3945 get a winter work certification for their ESCP to continue to operate during that
3946 period. What we expect through that additional certification process is reasons
3947 why they need to operate over winter, which usually would require evidence that
3948 they either have limited the works that they need to do over winter and have had
3949 consideration to the period at an earlier and this isn't a last minute, "We must

3950 continue doing bulk earthworks over winter because we want to put in our
3951 infrastructure in September.”

3952
3953 Those works usually look like things like people continuing to do the installation
3954 of civil works over that period or it's people who are almost finished their works
3955 but they don't have quite enough time at the end of that buffer to reach full
3956 stabilisation by the 1st of June date.

3957
3958 There's other examples where people have been provided with approval to
3959 continue doing workstream in that period.

3960
3961 Just for a little bit further information, last year there was 28 applications
3962 received for winter works to continue operating over that period and only two
3963 were declined. A lot of them though they're not just, “Yes, you've received
3964 approval to continue to operate?” There's a lot of negotiations that go on during
3965 that process to limit and reduce the amount of works that they want to do during
3966 that period.

3967
3968 Quite often that winter works approval is granted on a month-by-month basis.
3969 So that consent holder may need to come back the following month during that
3970 period and say, “We want to continue to do xyz.” It will be up to the compliance
3971 officer and the winter work approval team to determine whether they can
3972 continue operating during that period.

3973
3974 That's kind of a little bit of the gist of the process as it stands. Again, it's not
3975 written into the NRP at all or in policy but it is a standard condition of consent
3976 that in my opinion is reasonably accepted across the industry. I don't think the
3977 idea of the winter work close-down period is generally known, and I don't think
3978 it's a shock to the industry, but I think what resulted in the significant number of
3979 submissions received was the directness of that winter work shut-down policy
3980 that was originally in the PC1 notification. That really didn't reflect the fact that
3981 there are actually works that can be undertaken during that period that can be
3982 managed effectively, in my opinion.

3983
3984 [End of recording - 04.00.00]
[NRP PC1 – HS3 Day 2 – Part 3]

3985
3986 Vivian: I am happy to continue with my slides, if that works, if you want to have any
3987 questions at the moment.

3988
3989 Chair: I did have a question about this close-down period reference in Policy P29 and
3990 P27. Is this the right place to talk about that?

3991
3992 Vivian: Yes.

3993
3994 Chair: I think it's Horokiwi in their tabled statement say that terminology of close-down
3995 period does infer this automatic shutdown and that's not appropriate they say in
3996 the context of the s42A recommendations. They have provided some alternative
3997 wording, which I think is something like “managing earthworks during 1 June
3998 to 30 September in accordance with the Erosion Sediment Control Guidelines.”

3999
4000 But you're still supporting the reference to close-down period in that policy?

- 4001
4002 Vivian: In P29 and P27 is where my updated rebuttal that has been provided today
4003 addressed those concerns. At the end of (e) the wording “except where
4004 earthworks are required for quarrying activities” has been recommended to be
4005 placed in there.
4006
- 4007 It's my understanding that it wasn't the intent of those policies to cover the likes
4008 of quarries, nor do I think it's practical to expect quarries to shut down entirely
4009 over that period. The intent of those policies is to manage large open earthwork
4010 sites. Quarries have specific erosion sediment control measures in place to
4011 manage soil on top of what is expected of a normal bulk earth work site.
4012
- 4013 Chair: An exemption you say is appropriate for quarrying and they would be the only
4014 activity, so elsewhere bulk scale earthworks could occur? It is appropriate for
4015 clause (e) to apply?
4016
- 4017 Vivian: I think so, yes. I think it's important to note here, and is probably a good follow-
4018 on from that is, the amendments to R24 in my rebuttal evidence which states
4019 that except for those associated with quarrying and the use development
4020 operation maintenance of renewable energy production, earthworks shall not
4021 occur between the 1st of June and the 30th of September.
4022
- 4023 You've just identified there's an oversight – the use development operation and
4024 maintenance of renewable energy operations should also be reflected in that
4025 policy as well.
4026
- 4027 Chair: Thanks for that. I think you were here when I asked Mr Watson that question
4028 about definition, because the operative plan has a definition of renewable energy
4029 generation activities which also would incorporate grid connections but there's
4030 no defined term of renewable energy generation. Then here you've got new
4031 wording again I think – renewable energy production, so I think there's
4032 opportunity there for some.
4033
- 4034 Vivian: Noted. I did take note of your comments this morning and that we need to ensure
4035 there is consistency in reference to that.
- 4036 Chair: We're hearing from Ms Anderson about scope and also if there's scope needing
4037 to give effect to the RPS that we can get those definitions aligned.
4038
- 4039 Vivian: Yes. I think just following on from that is it's important to note here that the
4040 recommended insertion of this wording in my rebuttal is following submitter
4041 evidence from Transpower, Meridian, Horokiwi and Winstone Aggregates
4042 which I added to my rebuttal version that was given to you guys this morning. I
4043 think it's important to note here that NZTA actually requested for that to be
4044 inclusive of RSI for the reasons being that there is these higher order policy
4045 documents that provide direction.
4046
- 4047 I looked at the new RPS definition of RSI and in my opinion there is enough.
4048 [00.05.05]
4049 The provisions in the rules as I've recommended to provide for RSI in the
4050 continued operation and maintenance and upgrade of existing, particularly
4051 through the addition of that 23 and 22A rule.
4052

- 4053 I think that this is earthworks and it's a temporary activity. I don't necessarily
 4054 think that the construction of RSI needs its own suite of conditions or rules, or
 4055 they should be subject to different conditions or rules. I think that they can be
 4056 undertaken in accordance with the same conditions that others undertake
 4057 earthworks of the same scale and should be subject to the same requirements.
 4058
- 4059 I understand the reasoning of having separate suites of rules for RSI, particularly
 4060 within TA plans, but however I think in this case subject to earthworks there is
 4061 no reason they can't be undertaken in accordance with the conditions. I see no
 4062 extra benefit of them having their own additional suite of rules, which is what
 4063 they've requested and is also what is existing within the NRP.
 4064
- 4065 McGarry: (e) could at RSI for the quarry?
 4066
- 4067 Vivian: In the policy?
 4068
- 4069 McGarry: I'm just wondering whether it could be recognised there in (e) for quarrying
 4070 activities or RSI, those associated with RSI. I'm accepting your reasoning you
 4071 just said. I don't disagree with anything you just said.
 4072 Vivian: In my opinion I think that RSI as much as any other major construction project
 4073 should be able to programme their works around that period that poses a higher
 4074 risk to freshwater. I don't necessarily think if they are a large infrastructure
 4075 project they have the ability to plan those works around those periods. They can
 4076 still undertake certain works during that winter period – for example, civil works
 4077 or minor works. I don't necessarily think that they need to be excluded from that
 4078 period.
 4079
- 4080 McGarry: Just while we are on (e) as well, I was just thinking, if you were to reword the
 4081 chapeaux along the lines of avoiding direct discharges to water by – and then it
 4082 would be these other factors having a treatment device, designing and limiting.
 4083 I wonder if (e) would be better to be "limiting land disturbance" during the
 4084 closedown, just to be a bit more specific. Because that sounds like what you've
 4085 been doing through this process anyway, through this negotiation.
 4086 Vivian: Yes, I agree. I think, without confirming anything, I would need to look through
 4087 it again, but "limiting" I think could almost be potentially combined with the "to
 4088 simplify the policy".
 4089
- 4090 Kake: Looking at (d) and (e) / the whole chapeaux and that winter shutdown, that
 4091 period of June to September and also just taking into account what we have just
 4092 heard today, we're obviously experiencing large rainfall events and storms
 4093 outside of these winter periods. I'm looking at the erosion and sediment
 4094 guidelines and there's references in there in terms of the rainfall variability in
 4095 the Wellington region.
 4096
- 4097 Have you had any thought about including or looking at storm events again? So
 4098 those controls when they come in, at what point – is it through the recertification
 4099 that they can be reassessed as a result of large storm events or large rainfall?
 4100 Does that happen? I just feel like we're ignoring climate change.
 4101 [00.10.00]
 4102 Vivian: Do you mean in the event that there has been a significant rainfall event outside
 4103 of that period?
 4104

- 4105 Through conditions of consent there's various points in which I guess triggers
 4106 occur – so triggers for the monitoring, triggers for site audits, triggers for
 4107 repairing, maintaining and ensuring that those devices are operating effectively
 4108 as soon as possible following those rainfall events.
 4109
- 4110 Yes, those checks to happen. There's standard conditions on consent that require
 4111 monitoring and there's reporting requirements after those significant rainfall
 4112 events – especially after once one of the devices has discharged or failed.
 4113 Depending on the complexity of the site and what conditions have been placed
 4114 on those consents, there's a number of additional steps that must be taken –
 4115 whether that's providing site photos to ensure that you've cleaned your devices
 4116 appropriate and they're now ready to take on the next rainfall event should it
 4117 occur, or "Hey, your device didn't handle the size event that it should have an
 4118 you now need to have your **ESCP** [11.18] recertified to ensure that it's signed
 4119 appropriately.
 4120
- 4121 **Kake:** So those standard conditions, I suppose is what I am alluding to in terms of
 4122 interest. I think I'm just trying to understand how and when they get reviewed.
 4123 Can we get a copy of those Standard Conditions?
 4124
- 4125 **Vivian:** Yes definitely. I think it's also probably important to note that depending on the
 4126 complexity of site that Erosion Sediment Control Plan that's provided during
 4127 that consenting process or post-consenting is reviewed by an erosion sediment
 4128 control expert. Usually quite often external, occasionally internal if it's a low-
 4129 risk site.
 4130
- 4131 **McGarry:** I think Commissioner Kake part of it is trying to put together what Mr Reardon
 4132 said to us today, which is that with the weather trends that it's almost become a
 4133 historical thing – avoiding that period.
 4134
- 4135 Would it be fair to say that it's not just about opening up land, it's actually the
 4136 ability to revegetate during that period you just can't hydro-seed and get things
 4137 to grow in that winter period as well. So even though the weather patterns
 4138 mightn't be as predictable as they used to be, would that be a fair comment. We
 4139 are just trying to reconcile what Mr Reardon said today.
 4140
- 4141 **Vivian:** Forgive me, I can't remember exactly what he said. Are you referring to the
 4142 ability to stabilise before that period, whether that be through hydro seeding,
 4143 mulching or grass strike.
 4144
- 4145 **McGarry:** I think that's my part of the question. I think what Mr Reardon said was the idea
 4146 of avoiding the winter period has become for harvest, has sort of become a
 4147 historical idea because it's wet in summer as well. Any time can be wet now. I
 4148 think that's where Commissioner Kake's comment is coming from.
 4149
- 4150 I guess I'm suggesting that that winter period has got more reasons to be there
 4151 than just opening up land and removing vegetation and disturbance. It's actually
 4152 there is no ability to stabilize or revegetate during that winter period. Would that
 4153 be fair?
 4154
- 4155 **Vivian:** Do you have something to say Michael?
 4156

- 4157 Greer: There's another reason why the winter period is a shut down – is that the water
4158 table is higher and your risk of catastrophic failure is higher. Because of that you
4159 don't get as much drainage. Whereas in summer, if you get a big rainfall event
4160 and the water-table is low, that water will go somewhere and you won't
4161 necessarily have as high a risk of catastrophic failure.
4162
- 4163 Wratt: I have a question about Rules WH.R23 and P.R22. Your clauses (a) and (b) both
4164 relate to farms – Farm Erosion Risk Treatment Plan and Farm Environment Plan.
4165 The way it's constructed it almost sounds like those rules are specific to farms.
4166 They're not, are they? I mean, (c) goes on to talk about "earthworks does not
4167 exceed 3000 square metres per property" and then it talks in a new (b) from your
4168 rebuttal about network utility operators as well.
4169
- 4170 [00.15.00]
4171 Vivian: (a) and (b) are specific to farms - (a) and (b) if you are operating in accordance
4172 with one of those plans the following do not relate to you. That's largely because
4173 for example one the existing issues is around the construction of farm tracks and
4174 so often works that are occurring in accordance with the Farm Environment Plan
4175 may exceed 3000 square meters, but that rule provides those operators with the
4176 ability to operate in accordance with those Farm Environment Plans without
4177 obtaining resource consent.
4178
- 4179 Wratt: Just a wording suggestion: I think it would read better if it just said, "Erosion
4180 Risk Treatment Plan for a farm," and then (b) doesn't actually need "for the
4181 farm" because it says, "implement an action in a Farm Environment Plan."
4182
- 4183 Vivian: Noted. I can make some amendments.
4184
- 4185 Wratt: Thank you.
4186
- 4187 Chair: On the issue of the 3000 square metre cap and the point that was raised by the
4188 Airport and I think some other infrastructure providers about the work you're
4189 not just applying to anywhere on the property but for a particular project.
4190
- 4191 Dr Greer in your rebuttal you say theoretically the amount of sediment entering
4192 a single waterway from 3000 square metres of earthworks conducted over a year
4193 should not be impacted by the number of projects it's conducted for, but the same
4194 doesn't apply when the property is sufficiently large that earthwork spans
4195 multiple surface water catchments.
4196
- 4197 I'm just not sure I quite follow that sentence. Could you explain that further?
4198
- 4199 Greer: Imagine you've got an activity where you need to do lots of earthwork projects
4200 and you're going to the same receiving environment. That's just the same as
4201 calling it one project and doing the whole lot under one project. The fact that
4202 you've split it up into different projects really doesn't actually matter. It's
4203 earthworks on a site. It's the same receiving environment.
4204
- 4205 The large site one, and it's specifically in relation probably to road parcels that
4206 can go through a very long way and span multiple catchments, they have very
4207 large boundaries. They may actually just discharge to multiple waterways and

- 4208 therefore have no more of an effect than if there was a sub-division across the
 4209 boundaries. They're just in peaking different receiving waterbodies.
 4210
- 4211 In one situation someone is getting punished just by having a large parcel and
 4212 just by the nature of the activity; and the other one's people are just splitting up
 4213 their earthworks under project headings so they can, you could say potentially,
 4214 get around a rule. That's what I would do if it was down to multiple projects and
 4215 I was going to exceed the 3000 I would just do it under different projects.
 4216
- 4217 Chair: Ms Vivian, in light of that, does your rebuttal wording in (d) need revisiting – if
 4218 you are willing to?
 4219
- 4220 Vivian: I am not entirely sure Michael has seen my addition to (d). I will touch on that
 4221 either way, just from my consenting experience.
 4222
- 4223 I agree with Dr Greer in that example used in the submitter evidence regarding
 4224 Seaview Wastewater Treatment Plant for example, I agree with Dr Greer -
 4225 whether you split it into multiple projects, you're opening up the same amount
 4226 of soil to be disturbed and potentially discharged. However, during my
 4227 consenting experience there has been multiple occasions – for example with
 4228 NZTA where they may have a consent within a road parcel and 30 or 50
 4229 kilometres down the road it's the same road parcel, and technically they would
 4230 trigger a resource consent because they've exceeded that 3000 square metres.
 4231 [00.20.00]
- 4232 That was the reason why I inserted that (d) clause in there to address that issue.
 4233 I did toss and turn a lot over the wording particularly “being undertaken at any
 4234 particular location or worksite” largely because they are not defined, which I
 4235 had concerns about and talked through with my colleagues in policy.
 4236
- 4237 But that is what we came to.
 4238
- 4239 Chair: I think the example that the Airport gives is where they say the works they had
 4240 to do as part of the wastewater treatment facility and upgrade there was different
 4241 from work that they had to do at the other end of the Airport and yet consent was
 4242 triggered.
 4243
- 4244 Dr Greer, you're saying in an example like that it doesn't matter they're
 4245 technically two separate projects. If your earthworks are going to be discharging
 4246 into the same waterbody then it's appropriate that they should be managed in
 4247 accordance with this rule rather than be classes as permitted activity under
 4248 separate projects.
 4249
- 4250 Greer: Absolutely. They can call them separate projects all they want, but at the end of
 4251 the day the activity is running and operating an airport and its earthworks
 4252 facilitate that activity. Any person could carve up their activity under different
 4253 project headings that sound like it's something different, but if you're making
 4254 money in one way off the site then the earthworks is for that activity. I don't
 4255 really see project name has got to do with it.
 4256
- 4257 Vivian: I think one way that this has been addressed is through the insertion of that
 4258 permitted activity rule 22A and 23A. For the example of the Airport anyway, a
 4259 lot of what is referenced in their submission is because PC1 as notified has

- 4260 resulted in them getting multiple, multiple consents for small maintenance
 4261 requirements of like the Airport apron. Those consents are coming and they're
 4262 simple. Sometimes I think there's a few really small ones, which pose very
 4263 limited risk to the environment. If operating in accordance with that permitted
 4264 activity rule, if these recommendations were accepted, they still have to have
 4265 erosion sediment control measures in place.
 4266
- 4267 So, I think for large infrastructure projects the insertion of that permitted activity
 4268 rule should eliminate some of these issues.
 4269
- 4270 Chair: We will no doubt hear their views on that tomorrow or the next day.
 4271
- 4272 Kake: Can I just quickly jump in and ask a hopefully simple question? Wouldn't a lot
 4273 of those utility operators have their NORs and designations over some of these
 4274 areas anyway, so then they would be monitored to an extent from the TAs?
 4275
- 4276 Vivian: Yes, correct.
 4277
- 4278 Kake: Can I just ask hopefully again a quick question just in terms of the definition of
 4279 good management practices and just where these are. They're in the plan
 4280 because it's folded and it's defined. I'm just struggling to find it I suppose.
 4281
 4282 Is that in the NRP? Is it in the guidelines? If you could steer us.
 4283
- 4284 Vivian: That is a good point. I also am not aware off the top of my head that I have seen
 4285 that defined in the NRP or PC1 and so I would need to go and check that. It is
 4286 folded there.
 4287
- 4288 Sorry, I've just had confirmation it is defined in the Natural Resources Plan.
 4289 [00.25.00]
- 4290 Chair: Ms Vivian, the exemption for quarrying which you have, which you're now
 4291 supporting is a matter of discretion in number 8, as part of Rule 24, I think where
 4292 we are at is that renewable energy... the exact wording is to be clarified, but
 4293 should also be exempted as well?
 4294
- 4295 Vivian: Yes, that should have been included in there as well as the policy, as mentioned
 4296 earlier.
 4297
- 4298 Chair: I think it was Wellington Water that sought some additional relief in Rule 23A
 4299 regarding geo tech investigation bores. I think that you think that's already
 4300 covered in the rule, presumably by what's in clause (a).
 4301
- 4302 Vivian: I think any works required for the construction of a geo technical bore or bore
 4303 of the likes should be covered by the capsule permitted activity rule for
 4304 earthworks and that's R23 and R22.
 4305
- 4306 Chair: These are for infrastructure, so...
 4307
- 4308 Vivian: The infrastructure that's listed yes, but I didn't see a need to list every form of
 4309 infrastructure under that rule, because a significant amount of infrastructure
 4310 could be undertaken as a permitted activity anyway as minor earthworks. It's my

- 4311 understanding that there's not a significant amount of earthworks that's required
4312 for construction of bores.
4313
- 4314 Chair: I had read R23 and R22 as basically not applying to infrastructure, but you're
4315 saying that activity fits under there, or they could fit under 23A?
4316
- 4317 Vivian: That's my intent of those rules, yes. May need some requirement if it's not clear
4318 within the titles.
4319
- 4320 Bearing in mind that in the submitter evidence there was a request from I think
4321 two submitters (I would have to go back) who requested that the word "minor"
4322 is taken out of the heading for that infrastructure rule. It's my opinion that those
4323 works should be minor. Any major infrastructure works they should be required
4324 to obtain a resource consent anyway.
4325
- 4326 McGarry: Is minor earthworks defined?
4327
- 4328 Vivian: It's not defined no.
4329
- 4330 There is potential that I could provide a definition for minor earthworks.
4331 However, I think that list in the way that I have narrowed it down is pretty
4332 prescriptive and that those works couldn't be done at a large scale. A lot of them
4333 are linear and require very small areas of disturbance.
4334 McGarry: I think a definition will get very complicated very quickly.
4335
- 4336 Vivian: Yes. Another potential solution that I did think about was stating that it was
4337 earthworks associated with specific infrastructure or the following infrastructure
4338 or making it clear that it was just relevant to that infrastructure listed, but again
4339 it got worded for just a heading of a rule.
4340
- 4341 McGarry: It could just be minor earthworks or specified infrastructure or specify them.
4342
- 4343 Vivian: Yes, I would just need to check that aligns with the definition for specified
4344 infrastructure in the NRP.
4345 [00.30.00]
- 4346 Chair: Ms Vivian, in terms of what you wanted to cover with us, we've got some
4347 questions but they sound like they're probably... I don't want to say "random".
4348
- 4349 Vivian: There was a few other points. I think we might have covered them all, so I might
4350 just have to flick through my points.
4351
- 4352 One of the things that I did want to ask and I thought might be raised was that
4353 these rules also refer to those part FMUs and it has a trigger for winter works
4354 within part FMUs where that's not met.
4355
- 4356 Something I do just want to highlight with the case of these earthworks
4357 provisions is that it doesn't change from a permitted activity to you now require
4358 a consent. It changes the activity status if that consent holder wished to undertake
4359 works within the winter period.
4360
- 4361 Something that I do just want to highlight and that I hope is clear through the
4362 provisions is that if someone were to apply for a resource consent as a restricted

- 4363 discretionary activity and they were within a target attribute state where the
 4364 suspended sediment is met, yes they could apply for winter works, but there is
 4365 still going to be conditions on those consents that limit the winter works. It
 4366 doesn't just mean that those consent holders are able to attain resource consent
 4367 to just go gung-ho and continue over that winter period.
 4368
- 4369 I think that's particularly important following comments from this morning. For
 4370 example, there was a comparison between Tekapo and Taupō, where Taupō is
 4371 met, however it is a highly sensitive catchment and we would still want to see
 4372 specific thought and consideration going into the timing and staging of those
 4373 works, particularly over the winter period.
 4374
- 4375 Kake: What you just said there was I thought really quite helpful, just in terms of
 4376 understanding the intent of that. I'm just wondering if you could possibly think
 4377 about whether that should be included as an advisory note that just sits
 4378 underneath the chapeaux or something.
 4379
- 4380 Vivian: I am happy to do that. I don't know what the thoughts are with anymore notes
 4381 into plans. I am more than happy to draft something up for you guys to review.
 4382
- 4383 I also thought about potentially making it clearer in the matter of discretion –
 4384 there's a couple of them; the first one being the duration staging and timing of
 4385 works, so maybe just clarifying in that matter of discretion that that might
 4386 include restrictions or limitations on the amount of works undertaken during that
 4387 period. That's another option.
 4388
- 4389 Chair: Just on that TAS provision, you can only apply for RD consent for earthworks
 4390 in winter if you are a quarrying activity or renewable energy, is that right – where
 4391 the TAS is not met; but if you're none of those then you can't apply for consent
 4392 in the winter period.
 4393
- 4394 Vivian: That would move onto that discretionary activity rule.
 4395
- 4396 Chair: We are hearing from Transpower later this week but as I understand it you think
 4397 it's appropriate even with the national instruments that they have, that they're
 4398 still subject to that close-down and they should be getting discretionary consent?
 4399 [00.35.10]
- 4400 Vivian: If they're unable to meet that permitted activity rule and they wish to operate
 4401 during the winter period, then yes if they can programme their works around that
 4402 period.
 4403
- 4404 I also note that a lot of those activities that are undertaken by Transpower would
 4405 be able to undertaken as permitted with the insertion of that minor works
 4406 associated with the infrastructure rule.
 4407
- 4408 Chair: And is that because Ms Kennedy's evidence talks about or gives some examples
 4409 of the volumes of earthworks that they need for their maintenance activities and
 4410 that sort of thing. So, you've factored that in and you've also factored in the
 4411 national direction that applies to them?
 4412
- 4413 Vivian: Correct.
 4414

- 4415 McGarry: I guess it gets back to my comments about rewording the policy in terms of the
 4416 intent is to avoid direct discharges with sediment to water where they haven't
 4417 gone through a treatment device. With that in mind, I have a problem with the
 4418 rules that add in the associated discharge of sediment or floccment into a surface
 4419 waterbody or coastal marine area.
 4420
 4421 It kind of assumes that permitted activity is allowing a direct discharge. Then
 4422 you get through to (v) and "erosion sediment and control measures should be
 4423 used to prevent a discharge of sediment where there's..."
 4424
 4425 It's quite clear that it's trying to achieve what we talked about with the policy,
 4426 but I feel like adding in the red words now, you could read that, that it is trying
 4427 to permit those direct discharges to water. I don't know what the answer is sitting
 4428 her looking at it, or whether it is just a matter that it's onto land or into land,
 4429 where it may enter surface water. Because I'm not convinced it would be a direct
 4430 discharge. I guess there could be a pipe from a sediment pond straight to a river.
 4431
 4432 Vivian: That's a very high possibility.
 4433 McGarry: I guess the problem is the order maybe of the rule, that sediment control
 4434 measures comes after. As I say I'm not being very helpful. It's like I'm pointing
 4435 out the problem but I'm not coming up with a solution for you. I just wonder,
 4436 when you think about the policy and where you get to that in terms of avoiding
 4437 – because I think the rule needs to then reflect that it is only allowing the
 4438 discharge of sediment and all flocc... that's the surface water, provided that they
 4439 have gone through a treatment device. It's not direct.
 4440
 4441 I'm sorry I'm not more helpful at fixing the problem. I do think there's an issue
 4442 there.
 4443
 4444 Vivian: That's fine. I hear you. I think the problem is quite clear. Your concerns are quite
 4445 clear. I'm happy to go away and have a rethink of those rules. On the spot as
 4446 well, I've looked at them so many times and I can't come up with a solution.
 4447
 4448 Kake: On the same line of questioning, just getting some clarity on WH.R23A, so this
 4449 new rule.
 4450
 4451 The last clause at the end in blue... this is a bit random as well. So, (h) it goes
 4452 from "is a permitted activity provided the following conditions are met" (e)(f)(g)
 4453 and then (h). Then there's a strikeout of a number of words, and then it goes to
 4454 "erosion in sediment control measures shall be used to minimise."
 4455 [00.40.05]
 4456 I'm just wondering, alluding to the effects management hierarchy I suppose and
 4457 what this rule or the policy that might form it.
 4458
 4459 I think the question I am trying to ask is what is the preferential flow path? The
 4460 wording goes on to say, "where this preferential flow path connects with a
 4461 surface waterbody or the coastal marine area."
 4462
 4463 When you were drafting that, was this something that came from a submission?
 4464

- 4465 Vivian: No. That wording is from the original drafting of PC1 which I wasn't involved
4466 in. However, it is reflective of the policy. I believe the same wording was
4467 potentially used.
4468
- 4469 Kake: You go away and have a look at that.
4470
- 4471 Vivian: Yes, happy to have a look at that.
4472
- 4473 McGarry: Just looking in that same rule (c)(iii) stabilised within six months after
4474 completion. It seems like an awfully long time. I just wonder where the six
4475 months came from, after completion that is. Would have thought within the
4476 three-month period you should be able to stabilise. If you've limited the area
4477 that you've opened at any one time and you're doing staging and all those things,
4478 it does seem like an awfully long time. I'm just not sure where that six months
4479 came from.
4480
- 4481 Vivian: That's an interesting point. I also agree that six months does seem like a long
4482 time. Those conditions have been pulled over from the permitted activity
4483 conditions when it was drafted as well. I can go away and ask my colleagues as
4484 to the reasoning why six months was determined appropriate.
4485
- 4486 Chair: These provisions were all ones that went through the recent NRP from only a
4487 couple of years ago, right?
4488
- 4489 Vivian: Yes. Those conditions from that permitted activity rule have just been drafted as
4490 part of this PC1. They haven't come from the permitted activity rule, the NRP.
4491
4492 Sorry, when I said I pulled it through, it's pulled through from the permitted
4493 activity rule for earthworks that was drafted. I've just pulled the conditions
4494 through for this minor infrastructure rule.
4495
- 4496 Chair: Thank you.
4497
- 4498 Vivian: I think we have actually touched on the rest. The only other matters were the
4499 change in activity status from the non-complying to discretionary. There is
4500 reasons justified in my s42A. I think discretionary is more reflective of
4501 earthworks and the risk earthworks activities posed to the environment. I think
4502 the effects are well understand and can be managed in a way in which the effects
4503 are minor or less than minor. I think discretionary is a more appropriate activity
4504 status.
4505
4506 I believe the rest of my points we've actually already covered off.
4507
- 4508 Chair: Thank you. Ms Vivian, and this is also I think for Mr Watson and maybe Mr
4509 Willis, from tomorrow we're obviously hearing from submitters. It would be
4510 really useful where you have tabled revised versions, just in case anyone hasn't
4511 caught up with those, if we could have some extra printed copies because it's
4512 difficult talking with submitters about your latest provisions you're supporting
4513 when they haven't seen them. So at least if they could have them in front of
4514 them. If we could have a few extra copies available for submitters tomorrow.

- 4515 Vivian: I can ensure there is more copies printed out. I am happy to make sure our most
 4516 recent versions align in terms of formatting, so it's clear where the changes of
 4517 the most recent versions have been made.
 4518
- 4519 Chair: Yes. Thank you. I appreciate it's five o'clock. I don't want you to have to go to
 4520 too much work this evening. If you are able to capture just the things we talked
 4521 about, so I think adding in the references to renewable energy, which I think is
 4522 just in that where you've got the quarrying exemptions. That would be helpful.
 4523 [00.45.10]
- 4524 Vivian: I'm happy to make those changes that we've talked about, the ones that are clear.
 4525
- 4526 Chair: I appreciate the NTU but that might take some time.
 4527
- 4528 The other thing we wanted to just raise was it would be very helpful for us if in
 4529 the next version of the provisions, which might be what come out as part of your
 4530 reply, to footnote the relevant submitter relief, because then it's very clear where
 4531 the scope for the amendment has come from; or if it's something that's been
 4532 carried over because it was in the NRP. Having that tracked would be very
 4533 helpful.
 4534
- 4535 We are actually going to ask Ms O'Callaghan to do that as well in the HS2.
 4536 We'll be putting out a minute. There's a few other follow-up things from the
 4537 HS2 reply which we also wanted to ask Ms O'Callaghan and Dr Greer.
 4538
- 4539 I appreciate Dr Greer had to go and catch a flight, but we also some other
 4540 questions about this table. I don't know whether Mr Blyth here might be able to
 4541 help.
 4542
- 4543 Wratt: I think Mr Blyth and Mr Willis probably. I'm not sure if my brain is up to dealing
 4544 with it at this stage of the day.
 4545
- 4546 Referring to Table 1 in the rural s42A Report from Mr Willis, that's on page-52
 4547 I understand – the s42A Report.
 4548
- 4549 Just a couple of clarifications on that table as it is. Column B is entitled
 4550 'Reduction required to achieve target attribute state as notified' and Column C
 4551 is then 'Reduction required from 2012 to 2017 baseline to achieve target
 4552 attribute state.'
 4553
- 4554 My understanding is that both those columns are reductions required from 2012
 4555 to 2017 baseline. Is that correct. Maybe you could just specify that in Column B
 4556 as well.
 4557
- 4558 I do notice that the table that was in the s42A Report, Column A, there are some
 4559 significant differences between what was in the s42A Report and what was in
 4560 the table that you tabled yesterday morning. Is it possible to give an explanation
 4561 of why there's such big differences there.
 4562
- 4563 Willis: I'll have a quick go and then Mr Blyth might be able to chip in.
 4564

- 4565 The error arose because there was different iterations of the modelling outputs.
 4566 There was a provisional one and then it was later updated. The table I did used
 4567 the earlier modelling outputs which was subsequently updated.
 4568
- 4569 What was done in terms of the modelling to make the changes I'll have to pass
 4570 over to Mr Blyth, but that was my explanation. It was simply I'd used out-dated
 4571 data.
 4572
- 4573 Wratt: So, it was just an early reiteration?
 4574
- 4575 Willis: One of the major changes you would have seen there is I've swapped out the
 4576 Wainuiomata site. I'd actually included the wrong site as well. It's the one in
 4577 there, the Black Creek I believe is an urban site, whereas they're rural streams
 4578 which in the new version is included and it's White's is it? Sorry, I don't have it
 4579 in front of me, but from memory it's a different site. Otherwise, the tables are
 4580 the same.
 4581
- 4582 Wratt: That's correct. The one in the s42A Report says Black Creek and the one in the
 4583 revised version is downstream of White Bridge.
 4584
- 4585 Willis: Yes, they are different sites. It was an error. I had pulled out the wrong bit of
 4586 data.
 4587 [00.50.00]
- 4588 Chair: So which one is incorrect – the table yesterday?
 4589
- 4590 Willis: The table yesterday is correct, yes.
 4591
- 4592 Wratt: Mr Blyth, any other comment on that?
 4593
- 4594 Blyth: Thank you. No major additions to that except for was a provisional draft results
 4595 that have been utilised and then probably three to four weeks later we provided
 4596 a final, which was following a review and updates of some of the stock exclusion
 4597 and incorporation of revised approach in the land sliding – bearing in mind there
 4598 was quite a lot of activity over that period to develop that CLM to support these
 4599 hearings. I guess it was just lost in translation through that period.
 4600
- 4601 Wratt: Understood. Between columns B and C, column C is 'Target attribute state as
 4602 revised'. Some of those percentages in the target attribute state as revised are
 4603 actually higher than the ones in column B, which again there's not big
 4604 differences, although the Parangarahu catchment stream, Makarā, has gone from
 4605 34 percent in column B to 38 percent. I thought most of those targets that were
 4606 in the revised targets were actually lower than the ones in the original.
 4607
- 4608 Blyth: Primarily the reduction that we did was in Mangaroa with the revised targets –
 4609 so that one was due to the colour adjustment for CDOM (Colour Dissolved
 4610 Organic Matter). The others integrated a longer monitoring period up to eleven
 4611 years when I did the revised assessment and that's where you've had the slight
 4612 variation from Makarā increasing from 34 to 38 percent. But there is that
 4613 variance range.
 4614
- 4615 So, back to my HS2 evidence there's plus or minus one standard deviation that
 4616 could also have been. I've just taken the median. It could be plus or minus

- 4617 roughly four percent. There's an argument of where you want to sit but it's easy
4618 to just pick the middle isn't it.
4619
- 4620 Wratt: So, you're saying there that's not statistically relevant variation in that one?
4621
- 4622 Blyth: That's right. I think with visual clarity you will always have a variance of what
4623 could be plus or minus five or ten percent, and that's why these longer-term
4624 monitoring trends with SOE type monitoring is important to capture these
4625 changes that PC1 will affect over time. It's just natural variability in climate and
4626 monthly monitoring trying to capture that record over a long period.
4627
- 4628 Wratt: So those were the questions that I had specifically around the contents of the
4629 table as it is. The other request Mr Blyth is in your Appendix B to your technical
4630 evidence; you did those provisional scenarios that you talked about yesterday
4631 afternoon. I think it would be really useful in this table if you could add those,
4632 not all of them, add them into the table against column A which is the modelled
4633 load reduction from PC1 as notified. There were two that I would have thought
4634 would be useful to put in there.
4635
- 4636 You had the scenario which you called CFL, which I think is current funding
4637 limit.
4638
- 4639 Blyth: That's correct.
4640
- 4641 Wratt: As I understand it, that's what the modelled load reduction is from the Farm
4642 Environment Plans with the current funding.
4643
- 4644 Blyth: I think it doesn't include Farm Environment Plans, it's just the assumption that
4645 if only the WRECI project was continued the 130 hectares, and that was rolled
4646 out to the equivalent of about 1950 hectares of retired land by 2040, plus stream
4647 stock exclusion. There was no specific additional gains that might be made from
4648 Farm Environment Plans as part of that scenario. It's more like a worst-case
4649 backstop.
4650
- 4651 In preparation for that I've already prepared that table so we can release it with
4652 right of reply.
4653
- 4654 Wratt: There's just one other thing: if it could go in an adjacent column, is the LRF –
4655 the 40 percent Farm Environment Plan LRF. I guess the reason I'm suggesting
4656 that is that to me they seem to give the worst case and best-case scenarios that
4657 you could achieve in terms of the sediment reductions from the provisions
4658 around the rural part of PC1, in terms of where you might get to with the Farm
4659 Environment Plans.
4660
- 4661 [00.55.25] Blyth: Yes. As mentioned around the uncertainty of what you could achieve with a
4662 Farm Environment Plan, but the 40 percent resulted in equivalent load reduction
4663 to the notified PC1. So, possibly it's an overshoot. If you count that there's the
4664 earthworks and the forestry provisions as well and it might be reasonable to
4665 assume the 30 percent scenario, which falls a bit under, but once you assume the
4666 other provisions are in effect it could be a useful one to add to that table.
4667

- 4668 Wratt: That was what I was thinking would be a really useful expansion of that table,
4669 just to give a picture of where the provisions might take us to in terms of the
4670 sediment loads.
4671
- 4672 Blyth: Yes, I agree. It would be quite handy and we can produce that quite easily.
4673
- 4674 Wratt: Thank you. Mr Willis?
4675
- 4676 Willis: It may or may not be helpful, but Mr Blyth just mentioned that we have prepared
4677 something already, which doesn't quite get to your last point Commissioner
4678 Wratt, but it does deal with your first point. It's got the WRECI model scenario
4679 in it. I'm happy to distribute that. I have enough copies for the panel if they
4680 would like to take one and enjoy it over dinner or something.
4681
- 4682 We'll have to come back to you for that final column.
4683
- 4684 Just one other point I would make, because I think Mr Blyth is absolutely right,
4685 the WRECI scenario as he calls it isn't exactly provisions, but in my mind
4686 because the area models as being treated or put into some sort of vegetation
4687 through the WRECI programme, as we talked about yesterday, does correlate
4688 with the mapped area in terms of the over fifteen year period the extent of area
4689 that's shown on those potential risk or high risk areas. So, there is a reasonably
4690 good correlation between those things, which is why I say it's the modelling
4691 scenario that most approximates what the farm plan will achieve. But, as we say,
4692 there are other things to be added to that to try and estimate the full and final
4693 effects of the provisions of the package.
4694
- 4695 In terms of what the FEP will achieve it's probably the best estimation we can
4696 get I suspect. Other than that, we have to do the exercise that Mr Blyth has talked
4697 about - if we got another ten percent from FEPs what that would look like. But
4698 we don't have anything in those FEP provisions that required end 20, 30 or 40
4699 percent in addition to the WRECI programme.
4700
- 4701 I will pass to Josh if you like.
4702
- 4703 Wratt: Thank you, that was it. We can now wind up for the day, I think. I can put my
4704 brain back to sleep.
4705
- 4706 McGarry: When you're putting that other column onto the table it would be helpful to have
4707 some little notes. It could just be by asterisk in there Mr Blyth, with all your little
4708 clarifications that you continue to remind us of, that this modelling doesn't
4709 include the FEPs and it doesn't include this and it doesn't include that. I think
4710 that really helps us to consolidate this all into one visual for us.
4711
- 4712 So those little notes that you've given us along the way, that would be helpful
4713 just to remind what is in and out of the modelling for different things. Thank
4714 you.
- 4715 Blyth: Sounds good. I've already done that in a provision draft one, recognising it
4716 would be useful. Thanks.
4717

- 4718 Chair: Can I just confirm that we don't know what Mr Pepperell's Forestry
4719 Management Plans might achieve as well in terms of potential reductions. We're
4720 unable to quantify that.
4721
- 4722 Blyth: Yes, that's correct. You could assume best management practice might reduce a
4723 certain proportion of load, but I can't tell you exactly what that will be. All we
4724 know is that there's a sediment risk period from forestry. It could be five times
4725 the load for five years and hopefully if they do rapid replanting and resewing
4726 that Mr Reardon talked about, hydro seeding, then maybe you reduce that risk
4727 period down to three years or two years. The proof will come out in the long-
4728 term monitoring I suppose.
- 4729 [01.00.12]
4730 Wratt: Not going into the detail, but just note against the table, that it doesn't include
4731 any potential gains from forestry. Urban is another one – there's nothing in there
4732 from urban earthworks is there. It is just focused around the rural provisions as
4733 I understand it.
4734
- 4735 Blyth: Yes, the CLM modelling is reasonably blunt in that respect. The urban
4736 provisions it does apply the bio retention devices to infill in greenfield; so
4737 assuming that sort of 90 percent load reduction for sediment. But that doesn't
4738 account for earthworks of those activities when you're developing a greenfield.
4739 It just implies it's expected at urban land use might have a nominal amount of
4740 sediment that comes off it from park land or whatever, and then that's reduced
4741 with bio retention. But it doesn't account for the earthworks that Ms Vivian has
4742 been talking about.
4743
- 4744 Chair: Thank you, Mr Ruddock, that takes us to five o'clock which is the end of the
4745 day.
4746
- 4747 Just before karakia, just to note again our appreciation for the very
4748 comprehensive information we've received from the reporting officers and
4749 council experts. We are very grateful for the thorough way in which you have
4750 answered all of our questions and helped us understand the science and how it
4751 applies to the PC1 provisions. You've really enhanced our understanding of the
4752 framework. We appreciate that.
4753
- 4754 We are feeling in a better position now to hear from submitters over the next few
4755 days. No doubt there will be further requirements to come. Thank you very much
4756 everyone.
4757
- 4758 Unless there's anything else we can probably close with a karakia.
4759
- 4760 Ruddock: *Unuhia, unuhi*
4761 *Unihia kit e uru tapu nui*
4762 *Kia wātea, kia māmā, te*
4763 *Ngākau, te tinana, te wairua i*
4764 *Te ara takatā*
4765 *Koia rā e Tongo, whakairia*
4766 *Ake ki runga*
4767 *Kia tina! TINA!*
4768 *Haumi e!*
4769 *Hui e!*

4770

TĀIKE E!

4771

4772

4773 [End of recording – 01.03.00]