# BEFORE THE INDEPENDENT HEARING PANEL APPOINTED TO HEAR AND MAKE DECISIONS ON SUBMISSIONS AND FURTHER SUBMISSIONS ON THE PROPOSED DISTRICT PLAN

IN THE MATTER	of the Resource Management Act 1991 (the
	Act)
	AND
IN THE MATTER	of Hearing of Submissions and Further
	Submissions on the Wellington City Council
	proposed District Plan under Schedule 1 of
	the Act

### STATEMENT OF EVIDENCE OF RICHARD CAMERON SHEILD

ON BEHALF OF WELLINGTON REGIONAL COUNCIL

4 AUGUST 2023

#### **Executive Summary**

- 1 The National Policy Statement for Freshwater Management 2020 (NPS-FM 2020) requires that territorial authorities adopt an integrated approach to freshwater management, including the management of adverse effects of urban development on freshwater bodies.
- 2 Taking an integrated approach to the management of freshwater that manages the adverse effects of urban development is essential if Te Mana o te Wai is to be achieved. The recommendations for the Three Waters, Earthworks, and Subdivision chapters provide a comprehensive and integrated package of provisions that will contribute to achieving the target attribute states for waterbodies in Wellington City, and ultimately to achieving Te Mana o te Wai.

#### **Qualifications and experience**

- 3 My full name is Richard Cameron Sheild. I am a senior policy advisor in the Environmental Policy team at the Wellington Regional Council (Greater Wellington).
- 4 I hold a Bachelor of Arts with Honours in Politics and International Relations from Massey University and Master of Planning from Lincoln University.
- 5 I am a full member of the New Zealand Planning Institute and have been since December 2021.
- 6 I have over 5 years of experience in environmental planning, all spent at Greater Wellington. I was heavily involved in providing planning advice to the Te Whanganui a Tara Whaitua process and have provided planning evidence to Hutt City Council and Upper Hutt City Council plan change processes on the topic.

#### Code of conduct

7 I have read the Code of Conduct for Expert Witnesses set out in the Environment Court's Practice Note 2023 (Part 9). I have complied with the Code of Conduct in preparing this evidence. My experience and qualifications are set out above. Except where I state I rely on the evidence of another person, I confirm that the issues addressed in this evidence are within my area of expertise, and I have not omitted to consider material facts known to me that might alter or detract from my expressed opinions.

#### Scope of evidence

8 My evidence addresses Greater Wellington's submission points on the proposed Three Waters, Earthworks, and Subdivision chapters, and the recommendations made by the s42A report authors in response to these submission points.

#### Background – integrated management & the NPS-FM 2020

- 9 Section 3.5 of the NPS-FM 2020 includes direction for territorial authorities regarding their roles in freshwater management.
- 10 Section 3.5(1) requires of local authorities (underlined emphasis my own):

Adopting an <u>integrated approach</u>, ki uta ki tai, as required by Te Mana o te Wai, requires that local authorities must:

(a) recognise the <u>interconnectedness of the whole environment</u>, from the mountains and lakes, down the rivers to hāpua (lagoons), wahapū (estuaries) and to the sea; and

(b) <u>recognise interactions between freshwater, land</u>, water bodies, ecosystems, and receiving environments; and

(c) <u>manage freshwater, and land use and development, in catchments in an integrated</u> <u>and sustainable way</u> to avoid, remedy, or mitigate adverse effects, including cumulative effects, on the <u>health and well-being of water bodies</u>, freshwater ecosystems, and receiving environments; and

(d) encourage the co-ordination and sequencing of regional or urban growth.

- 11 Furthermore, Section 3.5(4) requires that "every territorial authority <u>must include</u> objectives, policies, and methods in its district plan to promote positive effects, and avoid, remedy, or mitigate adverse effects (including cumulative effects), of urban development on the health and well-being of water bodies, freshwater ecosystems, and receiving <u>environments</u>" (emphasis my own).
- 12 The NPS-FM 2020 makes it clear that Wellington City Council has a statutory role in managing and protecting freshwater within its district, and section 4.1(1) of the NPS-FM 2020 directs that every local authority must give effect to the NPS-FM 2020 as soon as reasonably practicable.

### Background – Proposed RPS Change 1 & Whaitua Te Whanganui a Tara

- 13 Proposed RPS Change 1 was notified on August 19<sup>th</sup>, 2022. This change includes significant new regional direction on several topics – climate change, urban development, indigenous biodiversity, and freshwater. In the context of the impacts of urban development on freshwater, Policy FW.3 articulates Greater Wellington's method to give effect to section 3.5(4) of the NPS-FM 2020.
- 14 Wellington City Council was a committee member in the Whaitua Te Whanganui a Tara process. This is the process used by Greater Wellington to implement section 3.2(1) of the NPS-FM 2020, which required engagement with communities and tangata whenua to determine how Te Mana o te Wai applies to water bodies and freshwater ecosystems within the Greater Wellington region.
- 15 The visions and aspirations of communities and tangata whenua as distilled through this process are captured by the Te Whaitua te Whanganui-a-Tara Implementation Programme<sup>1</sup> and Te Mahere Wai o Te Kāhui Taiao<sup>2</sup>, which include several recommendations relating to reducing the adverse impacts of urban development and intensification on water bodies.
- 16 While these documents themselves do not have statutory weight, they were developed as part of the process of giving effect to section 3.2 of the NPS-FM 2020 - engaging with communities and tangata whenua to determine how Te Mana o te Wai applies to water bodies and freshwater ecosystems in the region.

<sup>2</sup>https://www.gw.govt.nz/assets/Documents/2021/12/te\_mahere\_wai\_20211028\_v32\_DIGI\_FINAL.pdf

<sup>&</sup>lt;sup>1</sup> <u>https://www.gw.govt.nz/assets/Documents/2021/12/Te-Whaitua-te-Whanganui-a-Tara-Implementation-Programme\_web.pdf</u>

#### The importance of an integrated approach

- 17 As part of the Whaitua Te Whanganui a Tara process, the current state of waterbodies within Wellington City was identified and considered by the Committee in setting their recommendations. Appendix 1 shows the current state and current trends (where applicable) of several NPS-FM and other freshwater health attributes that were established during the whaitua process for waterbodies within Wellington City. Also shown in Appendix 1 is the kaupapa assessment summary conducted by mana whenua representatives for these same water bodies.
- 18 Of particular concern is the number of waterbodies showing worsening trends for various NPS-FM and waterbody health indicators, particularly those that are below national bottom lines for sediment and *e. coli*.
- 19 The kaupapa assessment also shows that most waterbodies are either in a state of Wai Mate (dead water) or Wai Kino (dangerous water) for several important cultural indicators.

#### Wellington City Council's approach to the NPS-FM 2020 and RPS Change 1

- 20 Wellington City Council officers have put a great deal of effort into ensuring that the proposed District Plan gives effect to the NPS-FM 2020, implements the WIPs, and aligns with the direction in proposed RPS Change 1.
- 21 The provisions in the Three Waters, Earthworks, and Subdivision contain a high level of integration in the management of land, water, and urban development. It is my view that these three chapters go a long way towards giving effect to the NPS-FM, as well as to aligning with proposed RPS Change 1.

#### Three Waters chapter - amendments sought by Greater Wellington

- 22 Greater Wellington has sought relief relating to the proposed Three Waters chapter to ensure that it gives effect to the NPS-FM 2020 and has regard to the direction in Proposed RPS Change 1 relating to freshwater.
- 23 Greater Wellington sought the following relief relating to the proposed Three Waters chapter:
  - 23.1 Retain the definition of 'Water Sensitive Urban Design' as it aligns with the regional plan and retain the Three Waters chapter with amendments to align with relevant programs and statements (351.49, 351.71).
  - 23.2 Amend PDP hydraulic neutrality provisions considering Proposed RPS Change 1 for hydrological controls (351.72).
  - 23.3 Consider permeable surface requirements for more than four units in Three Waters chapter and ensure full alignment of Three Waters rules with Subdivision chapter to address infrastructure standard discrepancies (351.74, 351.75).
  - 23.4 Add new policy for financial contributions in offsite stormwater management and include permitted, controlled, or restricted discretionary activity rules with associated financial contributions. Also consider discretionary, non-complying, or prohibited activity rules when financial contributions are not paid. Finally, determine costs of financial contributions (351.79-351.79).

- 23.5 Retain provision for development with sufficient infrastructure but add policy for new development to consider adequate water supply, including climate change, and encourage water use efficiency and demand management in development design (351.80-351.82).
- 23.6 Retain provisions for water sensitive design methods and amend THW-P1 to include multiple uses and values (351.83, 351.84).
- 23.7 Consider specifying extent of wastewater overflow reduction in THW-P1, aligning with relevant programs and policies (351.85).
- 23.8 Retain provision for sufficient infrastructure capacity prior to development and amend the Three Waters chapter to include decentralised wastewater re-use and alternative treatment/disposal systems (351.86, 351.87).

#### Three Waters chapter - S42A Officer's Response

- 24 Greater Wellington supported several of the recommended amendments in WCC's own submission on the proposed Three Waters chapter. I consider the insertion of definitions for "first flush", "undeveloped state", "constructed wetland", and "natural inland wetland" to be appropriate and beneficial. These amendments add clarity to the chapter and the new definitions for the two kinds of wetlands give effect to the NPS-FM.
- 25 The s42A recommended the rejection of two Greater Wellington submission points on THW-P1 (351.84 & 351.85). The former submission point was rejected on the basis that there will be unintended positive benefits of implementing water sensitive urban design, particularly for amenity, and the relief sought is to be consistent with a proposed policy in the RPS which has "little legal weighting". The latter point was rejected on the basis that wastewater overflows are also caused by events that that are unrelated to stormwater management which the policy is intended to manage and are difficult to quantify.
- 26 I agree with the reporting officer that it is probable that there will be unintended benefits resulting from implementing water sensitive urban design more widely and so accept the rationale for rejecting 351.84.
- 27 I acknowledge that wastewater flows are not always caused by caused by events related to stormwater and are difficult to quantify. However, Wellington urban streams and Kaiwharawhara stream are both below the national bottom line for *e. coli*, and anything the district plan can do to reverse this is valuable. My concern with the current wording of clause 5 is that it is relatively easy to exploit, a hypothetical 0.1% reduction in wastewater overflows would technically meet the policy requirement to "reduce" wastewater overflows.
- 28 In my view the wording of clause 5 could be tightened up by replacing the word "reduce" with "minimise". This is a term that is used in the regional plan and is defined as "reduce to the smallest amount reasonably practicable". This alternative wording may help to resolve the issue of difficulties of quantification by instead focusing on qualification.
- 29 The s42A report recommends the rejection of 351.87. The reporting officer's view is that without further national direction it is unclear whether the requirements for installing wastewater recycling systems falls within s31 Territorial Authority responsibilities under the

RMA, and whether it is the most appropriate method for managing effects on drinking water networks and promoting the efficient use of water in Wellington City.

- 30 While in my view s31 does not preclude WCC from inserting such provisions into the district plan given the broad wording of s31(1)(a) of the RMA, I accept that it is currently unclear whether such methods are most appropriate for WCC and therefore do not disagree with the rejection.
- 31 Several Greater Wellington submission points related to financial contributions are recommended to be rejected (351.76, 351.77, 351.78, 351.79). The officer states that the purpose of development contributions is to fund additional capacity in water supply, wastewater, stormwater, transport, reserves and community infrastructure and WCC already charges development contributions for stormwater management. I accept the rejection of these submission points considering Wellington City Council's comprehensive policy on financial and development contributions.
- 32 The s42A report has recommended amendments to THW-R4 and the insertion of a new THW-P6 to include new permeable surface requirements. In my view these recommended amendments are appropriate, as they will help reduce stormwater runoff and thus contribute to achieving the target attribute states. These amendments would also align with the direction in proposed RPS Change 1. THW-P6's use of the verb "require" in the context of providing permeable surface is strong and unambiguous direction, and I support the policy's recommended drafting.
- 33 The officer has recommended the insertion of two new rules (THW-R7 & THW-R8) that regulate permeable surface area for 1-3 residential units and in the large lot zone respectively. These new rules are consistent with the direction in proposed RPS Change 1 and on that basis, I support their inclusion.
- 34 Finally, I also support the amendments to the introduction of the Three Waters chapter to better align the wording with that of the NPS-FM, especially around giving effect to Te Mana o te Wai – though I note Greater Wellington did not further submit in support of these amendments, and in my view should have done so.

#### Earthworks chapter - amendments sought by Greater Wellington

- 35 Greater Wellington has sought relief relating to the proposed Earthworks chapter to ensure that it gives effect to the NPS-FM 2020 and has regard to the direction in Proposed RPS Change 1 relating to freshwater.
- 36 Greater Wellington sought the following relief relating to the proposed Earthworks chapter:
  - 36.1 Amend to include matter of control or discretion to protect cultural values and align with Proposed RPS Change 1 and add a new policy to avoid adverse effects on surface water bodies and Māori freshwater values (351.227, 351.228).
  - 36.2 Retain provisions related to earthworks management, slope stability, and erosion control due to their consistency with hazard provisions (351.229, 351.230, 351.232).
  - 36.3 Amend provision for minor earthworks to reflect risk minimization, aligning with Proposed RPS Change 1 (351.231).

- 36.4 Retain provision for erosion, dust, and sediment control, requiring adherence to GWRC's Erosion and Sediment Control Guide (351.233, 351.234).
- 36.5 Amend provisions for earthworks within significant natural areas, coastal margins, and riparian margins to restrict earthworks rather than enable them (351.235-351.237).
- 36.6 Retain provisions related to earthworks within flood hazard overlays and natural hazard mitigation works due to their importance and appropriateness (351.238-351.241).
- 36.7 Amend provision for earthworks in development areas to only allow for earthworks, considering potential effects on surrounding areas (351.242).
- 36.8 Correct reference to earthworks within the Flood Hazard Overlay in accordance with the correct provision (351.243).
- 36.9 Retain provision for existing slope angle due to its consistency with the RPS (351.244).
- 36.10 Amend existing slope angle to reduce it for consistency with the Natural Resources Plan (351.245).
- 36.11 Amend provision for transport of cut or fill material, considering rules in the Natural Resources Plan for consistency (351.246).
- 36.12 Amend provision for earthworks in the Airport Zone by reducing the existing slope angle for consistency with the Natural Resources Plan (351.247).

#### Earthworks chapter - S42A Officer's Response

- 37 I support the recommended amendment to EW-P2 to replace "not increased" with "minimised". This amendment would align with the direction in the RPS.
- 38 I also support the recommended amendment to EW-P10 that would change the verb used from "provide" to "only allow".
- 39 The s42A report recommends the rejection of 351.237 on the basis that "only allow for" is already the direction for earthworks in the coastal environment, with "provide for" serving as a carve out for the specified highly modified zones. I accept this rationale because the comprehensive standards and policy requirements for earthworks in these carved out zones provide a wide enough array of policy levers for WCC consents officers to manage the adverse effects caused by such earthworks.
- 40 The s42A report recommends the rejection of 351.228, considering that the issues raised have been addressed by amendments recommended to NE-O2 and NE-O5 in an earlier hearing stream.
- Having reviewed the recommended amendments to NE-O2 and NE-O5, I am satisfied that these amendments provide the direction that was sought by Greater Wellington in 351.228.
   In particular, the recommended addition of "protects and enhances Māori freshwater values" will serve to provide direction for the protection of mahinga kai.

- 42 In response to the rejection of several other submission points (351.235, 351.244, 351.245, and 351.246), I am satisfied that the wide suite of controls and conditions will effectively manage the adverse effects resulting from earthworks. Greater Wellington is also moving away from classifying land based purely on slope, instead adopting a more nuanced riskbased approach. This will be adopted in a future regional plan change.
- 43 The s42A recommended the rejection of 351.246 as the introduction of the Earthworks chapter outlines Greater Wellington's responsibilities. I am satisfied with how the introduction refers to Greater Wellington and see no need for further amendments.

#### Subdivision chapter - amendments sought by Greater Wellington

- 44 Greater Wellington has sought relief relating to the proposed Subdivision chapter to ensure that it gives effect to the NPS-FM 2020 and has regard to the direction in Proposed RPS Change 1 relating to freshwater.
- 45 Greater Wellington sought the following relief relating to the proposed Subdivision chapter:
  - 45.1 Insert a new process policy to identify natural character ratings in riparian margins for assessing activity effects, such as subdivision (351.178).
  - 45.2 Retain provision SUB-P3 subject to amendments (351.179).
  - 45.3 Amend SUB-P3 to strengthen wording regarding public transport, water efficiency, and greenhouse gas emissions reduction, and align with Proposed RPS Change 1 and the Wellington Regional Public Transport Plan 2021 (351.180).
  - 45.4 Retain provision SUB-P7 subject to amendments (351.181).
  - 45.5 Amend SUB-P7 to provide for decentralised wastewater re-use and treatment (excluding septic tanks) using alternative systems due to contamination and leaching concerns (351.182, 351.183).
  - 45.6 Amend provision SUB-P14 to replace "provide for..." with "only allow for..." to better preserve and protect natural character within riparian margins from inappropriate subdivision (351.184, 351.185).
  - 45.7 Retain provision SUB-P25 as notified (351.186).
  - 45.8 Amend SUB-P26 to replace "reduce or avoid an increase in" with "minimise" to align with Proposed RPS Change 1 objectives and policies (351.187).
  - 45.9 Amend Rule SUB-R17 to change the activity status to non-complying for full scrutiny of consent applications (351.188).
  - 45.10 Amend SUB-R18 to restrict the activity status within the Flood Hazard Overlay to restricted discretionary rather than controlled, allowing better control of applications and mitigation measures (351.189).
  - 45.11 Amend SUB-R23 to include Policy SUB-P25 in the listed policies under matter of discretion (351.190).
  - 45.12 Amend SUB-S2 to require new lots connecting to the Council's water supply system to include alternative supplies for non-potable use (351.191).

- 45.13 Amend SUB-S3 to update the reference to septic tanks or soakage fields to onsite domestic wastewater treatment and disposal (351.192).
- 45.14 Amend SUB-S3 to allow for de-centralised wastewater re-use and treatment (excluding septic tanks) using alternative approved systems (351.193).
- 45.15 Amend SUB-S3 to remove the reference to the Regional Standard for Water Services 2021 and add minimum requirements for new connections (351.194).
- 45.16 Amend provision SUB-S4 to refer to additional stormwater discharge requirements under the Natural Resources Plan (351.195).

#### Subdivision chapter - S42A Officer's Response

- 46 I agree with and support the recommended amendment to SUB-P14 as sought by 351.184 and 351.185. The stronger direction will better protect riparian margins and aligns with the direction in proposed RPS Change 1.
- 47 The reasons for the reporting officer recommending the rejection of submission points 351.181, 351.182, 351.183, and 351.193 are consistent with the reasons provided for rejecting the 351.87 in the s42A report for the proposed Three Waters chapter. My response to the rejection of that submission points (see paragraphs 29-30) also applies here.
- 48 The s42A report has recommended the rejection of 351.194 and 351.195. The reporting officer has recommended the insertion of a new responsibilities section in the chapter introduction that outlines Greater Wellington's role. I am satisfied that this recommended amendment addressed the issue behind the original relief sought for SUB-S3, in that it makes it clear that consent applicants may also need consent from Greater Wellington.
- 49 I do note however that clause 1 of the new responsibilities section seems to need rewording, as it is currently awkward and unclear. I recommend amending clause 1 to "GWRC has functions and responsibilities that may impact on subdivision", as this is clearer.
- 50 Regarding 351.188 and 351.189, it is my understanding that Greater Wellington's natural hazards experts are satisfied with the wider suite of natural hazards provisions, and so I see no need to dispute the recommended rejection of these two submission points.
- 51 I support the recommended amendment to SUB-S3 (as sought by 351.192) to refer to onsite wastewater systems, as it addressed the substance of the relief sought by Greater Wellington.

#### Conclusion

52 While in my view a couple of minor tweaks are needed, the three chapters discussed in my evidence reflect a high level of integration between land, water, and urban development, and also appropriately reflect the direction in both the NPS-FM and proposed RPS Change 1.

## Appendix 1: Current states of waterbodies in Wellington City

Sub- catchment areas	Macroinvertebrates		Periphyton		Fish		Human health <i>(E.</i> <i>coli)</i>	
	Current	Trend	Current	Trend	Current	Trend	Current	Trend
Kaiwharawhara Stream	с	Worsening	С		А		E	
Kaiwharawhara Estuary	С		А		Not app	blicable	С	
Mākara Estuary	D		С		Not applicable		С	
South-west coast rural streams	С	Worsening	С		A		E	
Wai Tai (southern coast)	В		A		Not app	blicable	В	
Wai Tai (south- western coast)	А		А		Not app	blicable	A	
Wellington urban	с	Worsening	С		A		E	
Te Whanganui- a-Tara (inner harbour)	В	Worsening significantly	А		Not apı	blicable	С	

## Table 1: Ecological and human health indicators

## Table 2: Ecological toxicity indicators

Sub- catchment areas	Copper		Zinc		Nitrate		Ammonia	
	Current	Trend	Current	Trend	Current	Trend	Current	Trend
Kaiwharawhara Stream	с	Worsening significantly	В	Worsening significantly	В		В	
Kaiwharawhara Estuary	A		A		Not applicable		Not app	licable
Mākara Estuary	А	Worsening	А	Worsening	Not applicable Not applica		licable	

South-west coast rural streams	A		A		A	A
Wai Tai (southern coast)	A	Worsening significantly	A		Not applicable	
Wai Tai (south- western coast)	A		А		Not applicable	Not applicable
Wellington urban	D	Worsening	В	Worsening significantly	В	В
Te Whanganui- a-Tara (inner harbour)	A	Worsening significantly	В	Worsening significantly	Not applicable	Not applicable

Table 3: Sediment, phosphorus, & dissolved oxygen

Sub- catchment areas	Sediment (clarity)		Sediment (deposited)		Phosphorus		Dissolved oxygen	
	Current	Trend	Current	Trend	Current	Trend	Current	Trend
Kaiwharawhara Stream	В	Worsening	А		D		А	
Kaiwharawhara Estuary			A		Not applicable		Not applicable	
Mākara Estuary	V Not applicable		С	Worsening significantly	Not applicable		Not applicable	
South-west coast rural streams	D	Worsening	D		D	Worsening	A	
Wai Tai (southern coast)	Not applicable		A	Worsening	Not applicable		Not applicable	
Wai Tai (south- western coast)	Not ap	plicable	А	Worsening	Not applicable Not		Not appli	icable
Wellington urban	D	Worsening	В		D		А	

Te Whanganui- a-Tara (inner harbour)	Not applicable	D	Worsening	Not applicable	Not applicable	
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## Table 4: Kaupapa assessment summary (Te Mahere Wai)

Sub- catchment areas	Water quality	Mahinga Kai	Habitat	Flora and fauna	Taonga species	Wāhi Tapu	Relationship audit	Mātauranga
	Kaupapa assessment	Kaupapa assessment	Kaupapa assessment	Kaupapa assessment	Kaupapa assessment	Kaupapa assessment	Kaupapa assessment	Kaupapa assessment
Kaiwharawhara Stream	Wai Mate	Wai Mate	Wai Māori / Wai Kautū	Wai Māori / Wai Kautū	Wai Kino	Wai Kino	Wai Kino	Wai Kino
Kaiwharawhara Estuary	Wai Mate	Wai Mate	Wai Mate	Wai Mate	Wai Kino	Wai Kino	Wai Kino	Wai Kino
Wellington urban	Wai Mate	Wai Mate	Wai Māori / Wai Kautū	Wai Māori / Wai Kautū	Wai Kino	Wai Kino	Wai Kino	Wai Kino
Wai Tai (southern coast)	Wai Mate	Wai Māori / Wai Kautū	Not applicable	Wai Māori / Wai Mate	Wai Kino	Wai Kino	Wai Kino	Wai Kino
Te Whanganui- a-Tara (inner harbour)	Wai Mate	Wai Mate	Not applicable	Wai Māori / Wai Mate	Wai Kino	Wai Kino	Wai Kino	Wai Kino

Figure 1: Table 4 legend (Te Mahere Wai, pp. 104).

Scale level	Description
Wai Ora	Pure/healthy water. This is water in its purest form. It contains the source of life and wellbeing. It is used in rituals to purify and sanctify and has the power to give life, sustain wellbeing and counteract evil. Wai Ora also means health.
Wai Māori	This is referred to as ordinary water which runs free and unrestrained, and it has no sacred associations.
Wai Kautū	Wadeable, however there is uncertainty about water quality and concern about potential risks.
Wai Kino	Dangerous/polluted water. The mauri (life force) of the water has been altered through pollution and has the potential to do harm to all living things (including humans and ecosystems). Also refers to dangerous waters such as rapids.
Wai Mate	This is effectively dead water. It cannot sustain life. It is dangerous to all living things (including humans and ecosystems) because it can cause illness or misfortune.

#### Appendix 2: Recommended amendments to provisions

THW-P1	Water sensitive design
	<ul> <li>Water sensitive design methods are incorporated into new subdivision and development and they are designed, constructed and maintained to:</li> <li>1. Improve the health and well-being of water bodies and freshwater ecosystems;</li> <li>2. Avoid or mitigate off-site effects from surface water runoff;</li> <li>3. Demonstrate best practice approach to the management of stormwater quality and quantity;</li> <li>4. Reduce demand on water supplies.; and</li> <li>5. Reduce Minimise wastewater overflows.</li> </ul>

#### **Responsibilities**

<u>GWRC has a key role under the RMA in conserving soil, maintaining and enhancing water</u> <u>quality and aquatic ecosystems and avoiding or mitigating natural hazards. In practice, this</u> means that:

1. GWRC have functions and responsibilities for the control relating to subdivision;

1. GWRC has functions and responsibilities that may impact on subdivision.

2. GWRC manages potable water where a connection to Council's reticulated potable systems

is not available, and the water supply is from groundwater or a waterbody.

<u>3. GWRC manages wastewater disposal where a connection to Council's reticulated wastewater</u> systems is not available and sewage is to be disposed to ground.

4. GWRC manages stormwater disposal where a connection to Council's reticulated wastewater

systems is not available and stormwater is to be disposed to ground or into a waterbody.

5. GWRC also manages disturbance activities in the beds of rivers and lakes.