

IN THE MATTER of the Resource Management Act
1991 (**RMA**)

AND

IN THE MATTER of Plan Change 2 – Infrastructure
Management, to the Operative
South Waikato District Plan 2015

**EVIDENCE OF CAMPBELL JAMES MCGREGOR
ON BEHALF OF SOUTH WAIKATO DISTRICT COUNCIL
Water Supply and Wastewater
16th October 2020**

1. QUALIFICATIONS AND EXPERIENCE

1.1 My full name is Campbell James McGregor.

1.2 I hold a Bachelor of Surveying from University of Otago, Master of Engineering Studies (Honours) and Post Graduate Diploma in Business from Auckland University. I am a Chartered Professional Engineer and chartered member of Engineering New Zealand. I am also a member of the Institute of Directors and Water New Zealand.

1.3 I have worked in New Zealand, Australia and the United Kingdom over the past 18 years within various engineering consultancies, providing infrastructure planning and design advice for residential, commercial and industrial developments as well as large scale infrastructure projects.

1.4 My experience includes:

- a) Design of residential, commercial and industrial development infrastructure, including bulk earthworks, roading, drainage (wastewater and stormwater management), and utilities.
- b) Project advisory and design leadership roles on numerous projects over the past 10 years including City Rail Link, Tamaki Implementation Plan, New Zealand Transport Agency's Northern Corridor Improvements.

- 1.5** I currently hold the role of Technical Director Urban Development at Harrison Grierson (HG) based in our Auckland office.
- 1.6** I have previously worked for Infracivil (NZ), Cook Costello (NZ), Aurecon (NZ), Arup (UK) and Harrison Grierson (NZ).
- 1.7** I have not been involved with Proposed Plan Change 2 (PC2) to date but have been asked to provide evidence outlining technical support to the Plan Change and to address submissions raised in relation to PC2.
- 1.8** I have previously prepared and presented evidence in Council hearings and the Environment Court on behalf of clients covering areas relating to earthworks, utilities and three waters infrastructure.
- 1.9** I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014 and have complied with it in preparing this evidence. I confirm that the issues addressed in this evidence are within my area of expertise and I have not omitted material facts known to me that might alter or detract from my evidence.

2. SCOPE OF EVIDENCE

- 2.1** I have been asked to provide evidence in relation to PC2 which proposes amendments to the SWDC District Plan assessment criteria and performance standards as they relate to the provision of wastewater servicing and water supply for new developments.
- 2.2** I understand the purpose of PC2 is to improve the visibility of the District's water and wastewater supply limitations and strengthen the assessment criteria by including these within the district plan rather than relying solely on other mechanisms such as Council's bylaws (Trade Waste Bylaw 2017 and Water Supply Bylaw 2015), engineering standards or specifications.
- 2.3** This will ensure that any proposed developments do not limit SWDC's ability to meet the needs of the community nor its ability to maintain the required "Level of Service" of the existing infrastructure, while ensuring continued compliance with SWDC's resource consent conditions.

2.4 My evidence will cover the following matters:

- a) Overview existing SWDC systems;
- b) Unanticipated high resource use industry;
- c) Comments on submissions; and
- d) Conclusions.

3. SUMMARY OF EVIDENCE

3.1 I have assessed the proposed changes under PC2 relating to water and wastewater provisions, level of service and proposed performance standards.

3.2 I have provided an overview of SWDC's current consents and provisions for growth and outlined the reasons the proposed PC2 amendments are sought by Council.

3.3 As the consents and growth are considered over a long-term period and the quantum of anticipated growth is low, there is a limited ability to absorb one-off large-scale demand within Council's Infrastructure planning.

3.4 Unanticipated high use industries could adversely impact Council's ability to maintain its current level of service under its own asset management plans, but also utilise a disproportionate quantum of the network, supply, and treatment capacities allocated to growth. This could limit the ability of the Council to service that anticipated growth to its full extent, in areas currently zoned for (both greenfield and brownfield) that growth.

3.5 PC2 therefore proposes the application of a permitted activity performance standard limitation of 10m³/day on business and industrial zones within the district. Any proposal in excess of the limit, would be treated as a restricted discretionary activity.

3.6 The introduction of the proposed performance standards will not prevent any development from taking place, it simply places a limit on what Council allows as a permitted activity in terms of water take and waste discharge from and to its reticulated networks. If the permitted limit is exceeded, in these instances Council can then apply the specific matters of discretion in working with the applicant to find solutions.

3.7 One submission specific to the performance standards was received from DPS Developments Limited through its consultants Veros Property Services, who considered the limitation should relate to the scale of the activity and not rely on the plan definition of a “site”. Veros also requested further information regarding any modelling or data that had been used to inform the proposed 10m³ limitation.

3.8 In my opinion the use of the “site” definition is appropriate, as this addresses cumulative impacts where a proposed activity is held across several adjacent titles, and the scale of activity is considered by inclusion of the 10m³ limitation.

3.9 I have read the Council s42a report and have no additional comments to make.

4. OVERVIEW OF SWDC SYSTEMS

4.1 The following sections provide a summary of the assets managed by SWDC in the provision of potable water and wastewater servicing.

4.2 SWDC holds a number of resource consents for water and wastewater across four main urban areas. These consents provide for the existing community and some growth, but make no allowance for intensive water/wastewater commercial or industrial uses.

4.3 To consider a potential scenario, it would be unacceptable for a single new water-intensive business to consume a large majority, or all, of the residual capacity within the district’s water and wastewater systems as this residual capacity needs to accommodate the future needs of the whole community. I discuss this further below.

Wastewater

4.4 There are four (4) wastewater treatment plants (WWTP), with each servicing a specific catchment area within the district. The four plants are:

- a) Putaruru
- b) Tokoroa
- c) Tirau

d) Arapuni¹

- 4.5** Four pipe reticulation systems then service the four urban areas. These combined assets equate to approximately 170km of pipework.
- 4.6** To service the catchment areas, in addition to the gravity reticulation there are several pumping stations.
- 4.7** Applications for the renewal of the discharge consents for the four plants were lodged late 2018. New consents for the Tirau and Putaruru WWTP discharges were granted by the Waikato Regional Council (WRC) earlier this year. The consent applications for Tokoroa and Arapuni WWTP discharges are still being processed by WRC.
- 4.8** The following maximum discharge limits and future growth allowance (35yrs to 2053 – consent timeframe) apply to the four WWTP's:

Plant	Current Maximum Discharge Limit (m ³ /day)	Population Annual Growth (%)	Industrial Allowance (at domestic concentrations) (m ³ /day)	2018 Consent Application Discharge Limit (m ³ /day)
Putaruru	2500	1	110	4500
Tokoroa	4000/6000	0.3	600	5000/7000 [^]
Tirau	900	1	20	900
Arapuni	120	1	None	120

[^] Dependent on flow within stream.

¹ Not all of Arapuni is connected to the WWTP. There are other onsite schemes and individual onsite treatment systems.

4.9 While a growth component has been allowed for as part of these consents, the increase in capacity is unlikely to be linear as the growth component won't yet be fully available until the necessary upgrade.

4.10 The ability to further increase discharge has a number of challenges:

- a) The wastewater treatment plant for Tokoroa discharges to a relatively low volume stream (receiving environment) and therefore the ability to increase the rate or volume of discharge would be challenging.
- b) While Putaruru and Tirau discharge to larger stream systems there are still limitations on what the stream can accommodate, particularly in terms of nutrients.
- c) While land discharge can be an alternative, this generally requires large land areas. I understand this has been thoroughly considered by Council, in collaboration with Raukawa, as part of a comprehensive options evaluation process undertaken in 2018 prior to lodging the WWTP discharge consent applications. This land disposal option was determined to be unaffordable.

Potable Water

4.11 The water supply for the district originates predominantly from artesian springs and deep bores.

4.12 Council provides four urban and two rural water supply services and manages approximately 230km of reticulation.

4.13 SWDC hold six (6) water take consents across the district. The water take limits of each of the consents is tabulated below.

Plant	Current Maximum Take Limit (m ³ /day)	Total Maximum Annual Volume	Consent Expiry
Putaruru (Waihou River)	4000	1,460,000	Mar 2048
Putaruru (Glenshea Park)	3800	1,390,000	Dec 2031
Tokoroa	15000	N/A	Dec 2031
Tirau	2000	500,000	Sep 2022
Arapuni	355	129,575	Mar 2031
Lichfield	40		Aug 2029

4.14 While there is currently additional capacity in the consented water take allowance that would account for the same growth considered under the wastewater discharge, there is also pressure to reduce water take allocations that would better reflect the Council's demand.

4.15 The ability to increase supply by way of additional water takes is also limited. The Waikato River is currently over allocated so the likelihood or ability to take further water over existing consents is low.

5. UNANTICIPATED HIGH RESOURCE USE INDUSTRY

5.1 Given the limited availability of additional water resources and the limited capacity within the existing networks and discharge consents, SWDC is concerned any unanticipated demand for a high resource use industry could require a disproportionate quantity of the available growth resource, thereby impacting SWDC's ability to service other development growth within the LTP period.

5.2 There is limited ability for the Council to adequately plan or cater for such demand and therefore the ability to apply restricted discretion to the servicing of such activities is proposed.

5.3 As stated previously in section 4 there is also limited ability for Council to obtain resource consents for either increased water takes or for increased wastewater discharge due to fully allocated catchments and the prevailing regulatory environment (National Policy Statement on Freshwater Management 2020 and Waikato Regional Plan).

6. PROPOSED PLAN CHANGES

6.1 While PC2 outlines several amendments and changes to the existing SWDC District Plan, the key changes from an engineering viewpoint are:

- a) The introduction and amendment of assessment criteria to align with level of service requirements and ongoing compliance with consenting requirements.
- b) The introduction of a definition for Levels of Service and the linkage to SWDC asset management plans.
- c) The introduction of additional performance standards under Chapter's 18 Tokoroa Business Zone, 22 Putaruru Business Zone and 27 Industrial Zone.

6.2 The performance standards proposed for the three commercial/industrial zones require that any permitted water supply or wastewater discharge be limited to 10m³/day. Any flow from a "site" above this limit would not be assessed as a permitted activity but as a restricted discretionary activity.

6.3 A development can still be proposed exceeding this performance standard but will be considered on its merits. It is simply allowing Council to apply oversight of the potential infrastructure impacts of a proposed activity should the limit be exceeded. In my experience any such development of this scale would likely look to engage with Council early to understand any specific site servicing constraints.

6.4 Applying SWDC's own general engineering standards the 10m³/day limitation is equivalent to approximately 9000m³ of commercial/industrial development. While this

standard does not account for high use industry it does give some reference of scale to the type of development that may still be permitted.

6.5 While no modelling has been performed to define the 10m³/day limitation, the limit has been set so to ensure those activities that would have a significant impact on the network's ability to maintain its current level of service would require further consideration.

6.6 SWDC has provided the past two years of water supply data which shows the limit (if it had been in place previously) would only apply to approximately 2% (9 users) of those who currently use more than 100 litres of water per day. The limit will not apply retrospectively to these existing users. However, the analysis indicates that, the number of future users affected by the proposed change in activity status is expected to be very limited.

7. COUNCIL S42A REPORT

7.1 I have read the s42A report and have no comments.

8. PLAN CHANGE SUBMISSIONS

8.1 I understand five submissions were received on the plan change in total, of which only one relates to my area of expertise: submission 3.

8.2 Submission 3 was received from DPS Developments Limited (DPS) through Veros Property Services dated 24th June 2020.

8.3 DPS agreed with all the proposed change provisions, except for those that relate to sections D1 – D3, New Performance Standards 18.4.13, 22.4.12 and 27.4.13.

8.4 DPS request relief stating that any limitation on service provision should take account of the scale of activity rather than the restriction relying on the definition of "site".

8.5 DPS also request further information regarding what informed the proposed supply and discharge volume limit.

8.6 A "site" is defined under the district plan as;

“An area of land comprised in one Certificate of Title (or for the purposes of subdivision is proposed to be held in one Certificate of Title), or adjoining areas comprised in two or more Certificates of Title in the same ownership and used for the same activity.”

8.7 I consider that this definition, in combination with the 10m³/day water supply\waste discharge limitation, adequately addresses the scale of activity that is to be permitted and that which would be considered as a Restricted Discretionary Activity.

8.8 With regard to the determination of the 10m³/day limitation, I have addressed this in sections 6.4 and 6.5 of my evidence.

8.9 I consider the proposed definition, proposed permitted activity standard and assessment criteria to be appropriate provisions for inclusion in the proposed district plan zones.

9. CONCLUSION

9.1 In conclusion I have read and considered the proposed PC2 revisions. In my opinion the proposed amendments are suitable and fit for purpose in providing Council the ability to apply some discretion in the assessment of larger scale proposed development within the district.

9.2 The number of proposals or activities that the performance standards will impact is likely to be low and, in my experience, activities of a scale that would trigger this activity status, would be engaging with Council early to understand any infrastructure limitations.

9.3 If the provisions are not included, there is the potential that a new large user either takes or discharges a significant proportion of the allocated growth, thereby causing SWDC difficulty in meeting the rest of the community's requirements and maintaining an acceptable level of service. In the worst-case scenario, non-compliance with Council's obligations under its regional resource consents may result, in potential threats or adverse impacts to the environment. Therefore, the ability to provide discretion in these instances in my opinion is appropriate.