



Otago Regional Council

Section 42A Staff Recommending Report

Discharge Permit Application RM19.051.01
By Queenstown Lakes District Council

The recommendation in the staff report represents the opinion of the writers and it is not binding on the Hearing Commissioners. The report is evidence and has no greater weight than any other evidence that the Hearing Commissioners will hear and consider.

Peter Christophers
and
Charles Horrell

7 October 2019

Executive Summary

Queenstown Lakes District Council has applied for resource consent to discharge wastewater overflows at various locations to freshwater receiving environments, or onto land in circumstances where it may enter freshwater, for a 35 year term.

The potential discharges of wastewater will come from the applicant's current and future wastewater network, and their extent is unknown. The discharges are caused by breakages and blockages and largely comprise untreated wastewater containing foreign objects and other contaminants that pass through the wastewater infrastructure.

After assessing the actual and potential effects of allowing the proposed activity and the provisions of the relevant planning documents and submissions, the recommendation of this report is **to decline the application**. The effects of the activity have not been quantified and, based on the limited information provided, the application is overwhelmingly inconsistent with all relevant planning documents, including Section 107 and Part 2 of the Resource Management Act 1991 (the Act).

Because of the global nature of consent sought, it is not possible to understand the specific characteristics of each potential discharge or assess the specific effects on the receiving environment. The restrictions proposed to apply to such discharges are relatively few. Further, no specific monitoring has been undertaken for past discharges. As a result of these factors the quality and quantity of these discharges, and the likely characteristics of future discharges, are unable to be accurately determined.

Purpose

This report has been prepared under Section 42A of the Act to assist in the hearing of the application for resource consent made by Queenstown Lakes District Council. Section 42A allows local authorities to require the preparation of such a report on an application for resource consent and allows the consent authority to consider the report at any hearing. The purpose of this report is to assist the Hearing Panel in making a decision on the application.

Report writers

Peter Christophers

I am a Principal Consents Officer employed by the Otago Regional Council. I have been employed by the Council as a Consents Officer since July 1996. I have processed numerous resource consents of varying types over that time.

I hold the qualifications of Postgraduate Diploma of Science in Geography, Diploma for Graduates in Geology and Bachelor of Science with a Major in Geography, from Otago University. I am an Associate Member of the New Zealand Planning Institute. I have been involved with the application since it was lodged and received by Otago Regional Council.

Charles Horrell

I am a Senior Consents Officer employed by the Otago Regional Council. I have been employed by the Council as a Consents Officer since October 2015. I have processed numerous resource consents of varying types over that time.

I hold the qualification of Bachelor of Applied Science, with Majors in Environmental Management and Economics, from Otago University. I have been involved with the application since it was lodged and received by Otago Regional Council.

1. Background Information

Applicant:	Queenstown Lakes District Council
Activity:	To discharge wastewater as a result of overflows into freshwater receiving environments, or onto land in circumstances where it may enter freshwater at various locations
Location:	Various locations throughout the Queenstown Lakes District

2. Key issues

We believe that the key issues with the application are:

- The incompleteness or unavailability of the information required to assess the likely adverse environmental effects of discharges proposed to be enabled by the consent, and the adequacy of potential measures to address such adverse effects.
- A lack of information to adequately assess the consistency of the proposed activity with relevant statutory instruments.
- A lack of information to adequately assess the matters specified by section 105.
- A lack of information to adequately enable an assessment against section 107, without which consent cannot be granted.
- The potential for adverse effects (including on cultural values) that are significant. As only a risk assessment has been provided, there is a high degree of uncertainty over the potential effects on the environment.

3. Recommendation

After assessing the actual and potential effects of the applications and submissions, and considering all of the matters in section 104 of the Act the recommendation is that the Hearing Panel **declines** Discharge Permit application RM19.051.01. In theory a grant of consent could be justified for small-scale discharges as it is discretionary activity under the Regional Plan. However, in this case we are recommending the application is declined for the following reasons:

1. The activity is inconsistent with the relevant statutory requirements including Part 2 of the Act;
2. The activity is contrary to Sections 105 and 107 of the Act; and
3. The potential for adverse effects (including on cultural values) that are significant. As only a risk assessment has been provided, there is a high degree of uncertainty over the potential effects on the environment.

4. Description of the Proposed Activity

Queenstown Lakes District Council (the applicant) has applied to the Otago Regional Council (the Council) for a discharge permit to authorise the discharge of wastewater overflows to freshwater receiving environments, or onto land in circumstances where it may enter freshwater. These discharges will occur as a result of blockages, breakages, system failures, extreme storm events, and capacity exceedance in the network. Discharges have not been previously authorised by a resource consent, a permitted rule or any other authority. The applicant is seeking a duration of 35 years.

As a territorial authority the applicant is responsible for the management and disposal of wastewater (as well as stormwater) throughout the Queenstown Lakes District. Wastewater is conveyed to various treatment plants via a network of pipelines utilising gravity and pumping. Under normal conditions, wastewater flows easily through the network pipes to treatment plants.

The Assessment of Environmental Effects (AEE) was prepared by Beca on behalf of the applicant. In support of the AEE were the following technical assessments:

- Wastewater Network Consent: Assessment of Ecological Effects (Report prepared by Ryder Environmental Limited, March 2019); and
- Wastewater overflow discharge consent - Queenstown Lakes District Council: Microbial risk assessment (Report prepared by National Institute of Water & Atmospheric Research Ltd, April 2019).

4.1.1 Nature of discharges

Blockages and breakages occur in wastewater pipes when foreign objects such as fats, sanitary items including tampons, sanitary towels, toilet paper, wipes and nappies etc, construction offcuts, debris and dust are put into the network at pipe openings (in houses, businesses or at manholes). External influences such as tree roots invading pipes are also another cause of pipe damage. When blockages and breakages occur, wastewater overflows via manholes and pump stations at any number of locations throughout the district. From the overflow locations, the discharge is either onto land in a manner which may enter water, or directly into waterbodies including lakes and rivers.

The discharges comprise largely untreated wastewater. However, they may also contain greywater, stormwater, floatable materials and other contaminants that pass through the wastewater infrastructure. Council has previously prosecuted the applicant on two occasions for discharges to the Kawarau River¹ and Lake Wakatipu². Photographs from these overflow events are attached as Appendix I to this report.

Discharges as a result of overflows typically occur at manholes (most common) and pump stations, and can flow overland directly into waterbodies, or overland into catch pits and into the stormwater network to the final point of discharge, being a waterbody. This is reflective of all wastewater networks and illustrates that overflows cannot be entirely prevented, or their locations known prior to their occurrence. That said, the recurrence and adverse effects of discharges from wastewater networks can be minimised through regular and effective network maintenance and monitoring.

4.1.2 Discharge network

The applicant's wastewater network contains 421km of wastewater pipes and 65 pump stations. The network carries 4,650,042 cubic metres (m³) of wastewater per annum and this volume will increase with a growing population and an annual increase in visitors. To accommodate the increase in numbers, the applicant proposes improvements to the wastewater network. Further details on these proposed improvements are outlined in Section 4.1.6 of this report.

The applicant manages seven municipal wastewater schemes throughout the Queenstown Lakes District which reticulates wastewater for Queenstown including:

- Sunshine Bay and Fernhill
- Arthurs Point
- Frankton Road, Frankton
- Lower Shotover including Quail Rise, Shotover Country
- Lake Hayes Estate and area
- Arrowtown
- Wanaka, Albert Town, and Lake Hāwea.

¹ *Otago Regional Council vs Queenstown Lakes District Council* [2017] NZDC 28767

² *Otago Regional Council vs Queenstown Lakes District Council* [2019] NZDC 832

This network uses a combination of gravity and pumped systems to carry wastewater to treatment plants. Typically, this conveyance is gravitational, carrying wastewater to natural low points (lakes, rivers). From here pumping stations lift the wastewater to higher points to continue under gravity to treatment plants.

4.1.3 Quality and Quantity of the discharge

As the applicant cannot specify the nature or location of future discharges, there is inherent and very clear uncertainty regarding potential future effects. The consent seeks to enable an unlimited and wide range of discharges at multiple points across their existing and future network. Furthermore as no specific monitoring has been undertaken for past discharges, the quality and quantity of the discharge is unable to be accurately determined. The discharge will generally be comprised of untreated wastewater which in some cases will be mixed with stormwater. This discharge will, among other things, contain high concentrations of nutrients, faecal coliforms and suspended sediment.

The volumes will vary depending on the site that the discharge occurs and the time it takes to cease the discharge. This leads to a high level of uncertainty over the potential scope and scale of the discharge and effects on the environment. Larger volumes are expected to occur from pump stations and manholes. The likelihood of the discharge entering water depends on the discharge's proximity and the topography of where the discharge may occur. Based on the discharges where the volumes have been quantified, the largest volume was 43 cubic metres into the Kawarau River³. Though not specified by the applicant, the maximum discharge volume could be significantly larger than this.

The application initially did not provide details on the frequency, duration, locations, quantity and quality of the proposed discharges. Following a request for further information in accordance with Section 92(1) of the Act, the applicant provided data that had been recorded outlining the past number of overflows, whether they reached water, the reason for the overflow and the time it took for the overflow to cease. This data had been recorded from 2015 to November 2018. Of the discharges that were recorded, 17 reached a water body. The reasons identified for causing the overflow varies with the majority due to blockages caused by tree roots or foreign objects. Based on this data, the locations of future discharges are likely to vary, with no pattern or reoccurring location. Whilst this information is useful, there is still uncertainty over the volume of future discharges, where they may occur and any effects on the environment. It will also not be possible to accurately record the volumes of any future discharge as they cannot be easily metred or monitored.

There was no further monitoring of the past discharges (such as to ascertain the quantity and quality of the discharges) other than sampling and analysis of the two Environment Court prosecutions (see Section 2.1.5). This may be due to the inherent difficulty in quantifying accidental discharges

4.1.4 Current management of overflows

All wastewater pump stations within the network include level alarms, which are used to advise the network operator if there is an issue with the pump station, causing the water level to rise above normal levels. The alarm notifications are sent via text message to the duty operator(s) to allow action to be taken before an overflow occurs. Each of the wastewater pump stations in the network are visited regularly to ensure

³ *Otago Regional Council vs Queenstown Lakes District Council* [2017] NZDC 28767

the required preventative maintenance is undertaken, and to allow any potential problems to be identified and corrected as early as possible.

If an overflow occurs that is not able to be prevented or picked up through the alarm systems, it is typically called in by a member of the public. Given the nature of such discharges, it is not possible to know for how long overflows may have been occurring prior to being notified by the public.

Over 2017/2018, the median response time to an alarm being raised was around 22 minutes. Once the response team arrives, the priority is given to containing and stopping the overflow and minimising risk to general public. In an event where the overflow has led to a discharge to a lake or river, informative signage is erected. The relevant authorities are informed as soon as practical and the affected waterbody is tested until the water quality has stabilised to acceptable swimming guideline levels. Once the site has been made safe, the response team restores the service. This typically involves clearing pipes to remove the blockage. Over 2017/2018, the median resolution time was 151 minutes.

4.1.5 Compliance of past discharges

The applicant has not held a discharge permit to authorise past discharges and the activity is not permitted, therefore all past discharges have been non-complaint and contrary to Section 15 of the Act.

Council prosecuted the applicant on two occasions for discharges to the Kawarau River⁴ and Lake Wakatipu⁵. The discharge to the Kawarau River was calculated at up to 43 cubic metres of untreated wastewater that was discharged over a two-day period. The discharge into Lake Wakatipu resulted in an estimated discharge of 912 litres of untreated wastewater. It was not known how long this discharge had occurred for.

In addition to these prosecutions, Council has issued 4 infringement notices on the applicant in relation to overflow discharges.

4.1.6 Planned improvements

To manage and reduce potential future overflows, the applicant has planned improvements to the network infrastructure. Planned improvements are provided for in the applicant's annual, long term and strategic plans.

According to the Queenstown Lakes District Council (QLDC) 2017/2018 Annual Plan, currently 9% of the operating expenditure was spent on managing wastewater. The Queenstown Lakes District is identified as being the fastest growing district in New Zealand, as such there is significant wastewater infrastructure upgrades proposed to account for the growth. The QLDC Infrastructure Assets Management Strategy 2018 – 2048 has an increased focus on infrastructure planning and signals increased capital investment for the three waters.

In addressing the issues identified by the 10 Year Plan, QLDC expects to spend around \$816 million on service improvements, increased capacity and extensions. Specifically, QLDC plans to spend \$105 million between 2018 and 2028 on the wastewater network including pump stations, pipes and treatment plants. The indicated investment of capital into the wastewater systems is long term, i.e. in excess of 30 years. The key aims for wastewater, in the QLDC 10 year plan for 2018-2028

⁴ *Otago Regional Council vs Queenstown Lakes District Council* [2017] NZDC 28767

⁵ *Otago Regional Council vs Queenstown Lakes District Council* [2019] NZDC 832

are: no contamination of public water supplies by three waters infrastructure; adverse effects on the environment from three waters infrastructure are managed/mitigated; and all resource consents are complied with.

5. Status of the Application

Resource consent is required under the rules of the Regional Plan: Water for Otago. There are no permitted activity rules that authorise the discharge of wastewater or other contaminants to water or to land in circumstances that may enter water from as a result of an overflow.

The applicant has applied for a discharge permit in accordance with the following rules of the Regional Plan: Water for Otago:

- **Discretionary** activity Rule 12.A.2.1: The discharge of human wastewater to water and to land in circumstances that may enter water;
- **Discretionary** activity Rule 12.B.4.2: The discharge of hazardous substances (from industrial sites) to water and to land in circumstances that may enter water; and
- **Discretionary** activity Rule 12.C.3.2: The discharge of any other contaminant (stormwater and other associated waste) to water and to land in circumstances that may enter water.

Discharges associated with Rules 12.B.4.2 and 12.C.3.2 form a small portion of the proposed discharge and the discharge is generally comprised of untreated wastewater (12.A.2.1). Nonetheless, as the activities are all the same activity status, the application will be assessed as a **discretionary** activity.

The Hearing Panel may grant or decline the application, and if granted may impose conditions of consent in accordance with Section 108 of the Act.

6. Consultation, Public Notification and Submissions

6.1 Consultation

Prior to applying for the proposed permit, the applicant undertook consultation with the general public and key stakeholders.

The general public were engaged via an information article followed by community drop in sessions over two days. The applicant considered the views expressed at these drop in sessions when preparing their application.

Consultation with stakeholders, including Aukaha, Te Ao Mārama Incorporated, Otago Fish and Game Council, Department of Conservation and the Ministry of Health, was undertaken through two collaborative stakeholder meetings. Feedback was received from the stakeholders which the applicant has considered and incorporated into their application.

6.2 Public Notification

At the applicant's request, the application was publicly notified in accordance with Section 95A(2)(a) of the Act⁶. The application was notified on 15 June 2019 and the submission period ended 12 July 2019.

⁶ See notification report A1232581

6.3 Submissions

193 submissions were received as complete⁷. Following the submission period, an additional 7 submissions were received. As it was considered reasonable to accept these late submissions, they were accepted⁸. In total 200 submissions have been received. Of those, 2 are in support, 1 neutral and 197 in opposition. In total, 83 have requested to be heard in support of their submission. A full summary of submissions is appended to this report. A general description of the submissions received is outlined in the sections below:

6.3.1 Submissions in support

Submissions in support were received from Friends of Lake Hayes Society Incorporated and Marinda Susan Spray.

In their submission Friends of Lake Hayes Society Incorporated generally supported the application on the basis that such discharges are inevitable and a consent would enable proactive means of managing the discharge as opposed to reactive measures (prosecutions and fines). The submitter considers this a better use of resources and rate payers' money.

Marinda Susan Spray in her submission indicated her opposition to the application as applied for, however supported a granting of a consent subject to conditions to limit the scope, frequency and nature of discharges.

6.3.2 Neutral Submission

The neutral submission was received from James Michael Bohm. In his submission, Mr Bohm accepted the intent of the application, however considered the application is deficient in managing the main cause of the problem (educating the public to avoid future blockages). It is indicated that Mr Bohm would support granting the discharge permit subject to conditions to develop and implement strategies for effective community engagement and education.

6.3.3 Submissions in opposition

Of the 197 submissions received in opposition, 177 were from individuals. In addition to this, 20 submissions were received from groups and organisations.

Submissions were received from both statutory and non-statutory groups, including:

- the Director-General of Conservation
- Otago Fish and Game Council
- Central Otago District Council
- Guardians of Lake Wanaka
- Federated Farmers
- Forest and Bird
- Aotearoa Water Action Incorporated
- Aukaha on behalf of Kāti Huirapa Rūnaka ki Puketeraki and Te Rūnanga o Ōtākou
- Te Rūnanga o Ngāi Tahu
- Te Ao Mārama Incorporated on behalf of Te Runanga o Oraka Aparima, Hokonui Runanga and Waihopai Runaka

In general, the submissions opposed the applications for the following reasons:

- The offensive nature of the discharge;

⁷ Council received 11 submissions that were not in the prescribed form and could not be accepted.

⁸ See Report A1263134 dated 8 August 2019

- The potential adverse effects on human health, aquatic ecology, cultural values, tourism and amenity values;
- The lack of assessment provided regarding the potential adverse effects;
- The long-term nature of the proposed activity; and
- The lack of alternatives considered.

7 Site Description – the Receiving Environment

7.1 Queenstown Lakes District

The Queenstown Lakes District covers some 8,500 km² on the eastern side of the Main Divide of the Southern Alps. It reaches from Makarora and Lakes Wanaka and Hāwea in the north to Lake Wakatipu and Kingston in the south.

The District is the fastest growing district in New Zealand and has been recognised by Central Government as a high growth district under the National Policy Statement for Urban Development Capacity 2016. Most of this growth is centred around Queenstown and Wanaka. As well as domestic growth steadily increasing in these areas, they are popular with tourists.

7.2 Site locations

A discharge may occur at any point across the applicant’s wastewater network. In order to assess the receiving environment, the applicant has identified 47 sites that are either pump stations or manholes where the discharge could occur. The location of the discharges and their probability for entering water are shown in in Table 1 below.

The applicant has detailed all of the receiving environments in their application. Under Section 42(1B)(b) this assessment is not in dispute and is adopted here. For context, key information about the receiving environment is provided in Appendix 2.

Table 1 summarises the details of each of these sites and their likelihood to enter water, and Figures 1-5 in Appendix 1 show their locations. Its noted that sites 1-35 are overflow sites that currently exist throughout the wastewater network, while sites 36-47 are potential overflow sites following the establishment of future planned infrastructure.

Table 1: Locations of sites and probability of entering water bodies should a discharge occur. Source: Application.

Site	Approx. Coordinate location (NZTM 2000)	Legal description	Distance to water (m)	Receiving water body/bodies	Probability of entering a water body ⁹
1	E1292838 N5045241	Road reserve	16	Lake Wanaka	High
2	E1292695 N5046255	Lot 12 DP 301972	110	Lake Wanaka (Bremner Bay)	Low-moderate
3	E1292562 N5045104	Lot 29 Block XIV Lower Wanaka SD	30	Lake Wanaka (Eely Point)	Moderate-high
4	E1293634 N5043488	Section 1 Block L TN OF Wanaka	120	Lake Wanaka (Roys Bay)	Moderate-high
5	E1292094	Section 46 Block III	105	Lake Wanaka (Roys	Moderate

	N5043489	Wanaka SD		Bay)	
6	E1294074 N5043000	Section 12 Block XLIX TN OF Wanaka	71	Bullock Creek	High
7	E1296428 N5043228	Road reserve	210	Cardrona River	Negligible
8	E1294652 N5047108	Section 59 Block XIV Lower Wanaka SD	70	Clutha River/Mata- Au	Moderate-high
9	E1296797 N5043994	Road reserve	650	Cardrona River	Negligible
10	E1298695 N5045277	Section 2 SO 482175	25	Clutha River/Mata- Au	Moderate-high
11	E1297593 N5046032	Road reserve	120	Clutha River/Mata- Au	Low-moderate
12	E1297668 N5045792	Road reserve	114	Clutha River/Mata- Au	Moderate- high
13	E1297752 N5045441	Road reserve	70	Clutha River/Mata- Au	Moderate
14	E1305060 N5038127	Lot 301 DP 361422	400	Luggate Creek	Negligible
15	E1305626 N5038268	Lot 300 DP 507844	374	Luggate Creek	Negligible
16	E1304871 N5038711	Lot 303 DP 375320	110	Luggate Creek	Moderate
17	E1304818 N5038980	Crown Land Block VI Tarras SD	15	Luggate Creek	High
18	E1272275 N5014340	Section 1 SO 386245	42	Arrow River	Moderate-high
19	E1271375 N5014224	Road reserve	3	Arrow River	High
20	E1270166 N5015038	Road reserve	425	Bush Creek	Negligible
21	E1259473 N5009949	Lot 300 DP 389068	292	Shotover River	Low
22	E1258722 N5009264	Part Section 148 Block XIX Shotover SD	8	Shotover River	Moderate-low
23	E1258253 N5004142	Section 6 Block LI TN OF Queenstown	34	Lake Wakatipu (Queenstown Bay)	High
24	E1255379 N5002497	Part Reserve B Block I Mid Wakatipu SD	23/150	An unnamed tributary of Lake Wakatipu and Lake Wakatipu (Sunshine Bay)	High
25	E1263464 N5005932	Section 9 Block XXXI Frankton Tn	60	Lake Wakatipu (Frankton Arm)	Moderate-high
26	E1263590 N5005618	Section 9 Block XXXI Frankton Tn	10	Lake Wakatipu (Frankton Arm)	High
27	E1258906 N5003902	Section 1 SO 410336	25	Lake Wakatipu	High
28	E1260144 N5002672	Lakeside Reserve (Crown Land) Lot I	25	Lake Wakatipu	Moderate-high

		Coneburn SD			
29	E1264896 N5004604	Lot 604 DP 24571	52	Kawarau River	Moderate-high
30	E1269932 N5012036	Lot 3 DP 15096	84	Lake Hayes	Moderate-high
31	E1270145 N5010579	Section 65 Block XI Shotover SD	13	Lake Hayes	High
32	E1304243 N5053637	Road reserve	52	Lake Hāwea	Moderate
33	E1303217 N5053638	Road reserve	98	Lake Hāwea	Moderate
34	E1303568 N5051566	Lot 2 DP 24534	380	Hāwea River	Negligible
35	E1304593 N5052682	Road reserve	990	Lake Hāwea	Negligible
36	E1264200 N4971284	Section 1 Block XX ON TF Kingston	36	Lake Wakatipu	Moderate
37	E1264636 N4971051	Road reserve	30	Lake Wakatipu	Moderate-high
38	E1265180 N5003230	Part Lot 1 DP 20511	0	Various ephemeral tributaries of Lake Wakatipu	Low-moderate
39	E1266465 N5007194	Crown Land Block III Shotover SD	150	Shotover River	Low
40	E1236889 N5021238	Section 12 SO 369025	0 (pipe crossing)	Stone Creek	High
41	E1236846 N5022211	Section 7 SO 369025	0 (pipe crossing)	Buckler Burn	High
42	E1285358 N5024276	Section 6 Block I Cardrona SD	15	Cardrona River	Low-high
43	E1303119 N5043149	Crown Land Block IV Lower Wanaka SD	0 (pipe crossing)	Clutha River/Mata- Au	Low-high
44	E1304286 N5038132	Crown Land Block VI Tarras SD	0 (pipe crossing)	Luggate Creek	Low-high
45	E1305616 N5038253	Lot 300 DP 507844	0 (pipe crossing)	Dead Horse Creek	Low-high
46	E1284332 N5045544	Section 1 Block XV Lower Wanaka SD	55	Lake Wanaka (Glendhu Bay)	Moderate
47	E1269477 N5014383	Lot 4 DP 25465	12	Mill Creek and Lake Hayes	Moderate-high

7.3 Groundwater

The discharge may occur to land in various locations throughout the district. Groundwater is generally of high quality and is utilised for potable water, stock water and commercial use. There are a number of both consented and permitted water takes throughout the district.

There are a number of groundwater protection zones¹⁰ where aquifers have been identified as particularly sensitive to discharges. These groundwater protection zones are the Wakatipu Basin Aquifer, **Cardrona Alluvial Ribbon Aquifer, Wanaka and**

¹⁰ A groundwater protection zone is defined under the RPW as: An area of land in which land use and water use activities are to be managed to protect the underlying groundwater resource.

Hawea Basin aquifers. Figures 6-9 in Appendix 1 show the locations of these groundwater protection zones. Overflows may occur over any of these groundwater protection zones.

7.4 Amenity and recreational values

The Queenstown Lakes District is notable for its natural features and dramatic scenery. The natural characteristics of the lakes and rivers of the district are iconic not only for the region, but also for New Zealand. The extensive range of activities, sights and locations provided throughout the district has ensured the development of markets from high value, luxury tourism to backpackers, hostels and freedom camping. As identified by Otago Fish and Game Council¹¹, the lakes and rivers of the Queenstown Lakes District contain both nationally and regionally significant recreational fishing values.

7.5 Cultural Values Statement

The applicant commissioned Aukaha, on behalf of Kāti Huirapa Rūnaka ki Puketeraki, Te Rūnanga o Ōtākou and Hokonui Rūnanga & Te Rūnanga o Awarua, Hokonui Rūnanga, Ōraka/Aparima Rūnanga and Waihōpai Rūnanga, to prepare a Cultural Values Statement (CVS) that was appended to the application on 14 June 2019. The CVS describes the cultural values associated with the receiving water bodies subject to the application. Overall, the lakes and rivers subject to the application are of strong cultural significance.

A CVS differs from a Cultural Impact Assessment in that a CVS does not provide any assessment of the actual and potential effects of the activity, rather only presents the values associated with the receiving environment. This was determined by Ngāi Tahu to be more appropriate due to the nature of the activity.

7.6 Regionally Significant Wetlands

Regionally Significant Wetlands are defined by Policy 10.4.1A of the Regional Plan: Water for Otago as being:

- (a) *Listed in Schedule 9 and mapped in maps F1-F63; or*
- (b) *Within a wetland management area listed in Schedule 9 and mapped in maps F1-F63; or*
- (c) *Higher than 800 metres above sea level.*

The applicant has not applied for any discharges to a Regionally Significant Wetland. A review of the Regionally Significant Wetlands listed in Schedule 9 of the RPW, shows no wetlands in close proximity to any of the 47 locations the applicant has identified.

However future infrastructure development may mean that discharges to wetlands occur.

7.7 Site Visit

Due to the nature of the discharge being from a number of locations throughout the Queenstown Lake District, a site visit was not considered necessary. We are familiar with the district and the receiving waterbodies.

¹¹ Submission dated 12 July 2019 from Nigel Paragreen on behalf of Otago Fish and Game Council

8. Assessment of Adverse Environmental Effects (s104 (1)(a))

The environmental effects of allowing the proposal are outlined in the Sections below. This assessment informs our assessment against Section 104 of the Act. The applicant also provided an AEE which is contained within Section 5 of the application.

8.1 Effects of the Water Quality

8.1.1 Effects on Freshwater Ecology

The ecological values associated with the receiving waterbodies are outlined in Appendix 2 of this report. The district supports a significant range of freshwater ecology values that are maintained through the high water quality in the lakes and rivers. This high water quality is demonstrated through the majority of the lakes and rivers already achieving their targets under Schedule 15 of the RPW, as well as Council's State of the Environment Surface Water Quality in Otago 2006 to 2017 concluding that water quality in the Upper Clutha catchment is excellent.

Generally, discharges as a result of wastewater overflows lead to increased concentrations of nutrients, *E.coli*, and other associated contaminants in the receiving environment. The specific nature and extent of effects associated with a discharge on freshwater ecology are dependent on the volume, duration and receiving environment.

As the nature of future discharges from the applicant's network cannot be predicted with certainty, and its past discharges have generally not been monitored in terms of duration, quality and quantity (other than what has been recorded for the prosecutions), it is hard to quantify the effects on freshwater ecology of allowing the proposed activity. Due to the nature of the proposed application and discharges, such data is unable to be provided. Given the lack of data to inform an assessment of actual and potential adverse effects, Dr Dean Olsen from Ryder Consulting Limited on behalf of the applicant has undertaken a risk-based assessment. This assessment is contained within Table 8 in Appendix C of the Assessment of Environmental Effects. The assessment considers two aspects of the discharge; the likelihood of the discharge entering water at any of 47 sites provided (refer Table 1) and the potential risk associated with the discharge.

Based on the risk assessment, Dr Olsen summarises the potential effects in each of the receiving waterbodies in Table 7 in Appendix C of the AEE. The applicant concludes that subject to their proposed conditions, that seek to mitigate and remedy the effects, the adverse effects on aquatic ecology will be short-term and no more than minor. We disagree with this conclusion, as do a number of submitters.

A number of submitters raised concerns over the actual and potential effects of the discharge on aquatic ecology, as well as the lack of assessment provided by the applicant. Notably, Otago Fish and Game and Department of Conservation consider a lack of assessment had been provided regarding adverse effects on both native and introduced aquatic ecology. Many submitters also referenced the sensitive nature of the receiving water bodies, particularly the lakes in the district. Central Otago District Council, Guardians of Lake Dunstan and number of individuals in their submissions also raised concern of over the potential downstream effects across the district boundary, particularly the adverse effects on Lake Dunstan. Downstream effects (across the district boundary) were not discussed in the AEE.

Dr Michael Greer of Aquanet Consulting Limited has been engaged to review the effects on freshwater ecology on behalf of Council's Resource Science Unit. The full assessment is appended to this report in Appendix 4.

Dr Greer has reviewed the assessment provided by Dr Olsen for the applicant. Dr Greer has noted that the ecology assessment thoroughly describes the risk of wastewater overflows entering waterbodies when they occur and the sensitivity of receiving environments to such discharges. However, without adequate understanding of the frequency, duration, quantity and quality of the discharges it is not possible to quantify the actual and potential adverse effects. It is our opinion that this is a significant issue for the application and is one of the reasons why we are recommending that it is declined.

In accordance with Section 92(1) of the Act, the applicant was requested to provide any monitoring data available from past discharges. The applicant provided data from overflow events between 2015 and 2018. This data outlined the number of overflows, whether they reached water, the reason for the overflow and the time it took for the overflow to cease. Dr Greer reviewed this data as part of his assessment for Council. Although the data in some respects indicates an infrequent discharge, Dr Greer has raised concern over its validity given a discharge into Lake Wakatipu, which the applicant was prosecuted for, was not recorded as entering a waterbody. It is possible that this was a singular error or omission in the data; however, the failure to record such a notable discharge casts some doubt over the remainder of the data. The applicant may wish to address this point in its evidence.

Consequently, Dr Greer considers that this data cannot be relied upon. Without this, and given the generic nature of the application, it must be assumed that the discharge could be frequent, of high volume (and duration) and into sensitive receiving water bodies. This has the potential for significant adverse effects on freshwater ecology. The potential for significant adverse effects is demonstrated in water quality data that was undertaken for the prosecution for the applicant's discharge to the Kawarau River.

We agree with Dr Greer's assessment and therefore conclude that there is a high degree of uncertainty over the potential adverse effects, but based on available information the adverse effects on aquatic ecology are likely to be more than minor and potentially significant. This assessment is included in the final assessment and brief of evidence of Dr Michael Greer and attached in Appendices 4 and 5 respectively.

8.1.2 Effects on Public Health

As outlined in Sections 7 and 8 of this report, members of the public interact closely with the receiving water bodies. This interaction includes both for drinking water, as well as for recreational values e.g. swimming and boating.

Discharges of wastewater increase the concentrations of *E.coli* and nutrients in water which can be toxic if the public comes into contact with it. The effects on public health can be split into two:

- Effects on drinking water; and
- Effects on recreational users e.g. swimming.

Further discussion of each of these effects is provided below.

8.1.2.1 Effects on drinking water

Where a discharge occurs, there is potential for adverse effects on communities and individuals who abstract water for potable use. Where water is contaminated and used for potable supply it may lead to human health effects including bacterial, viral and parasitic diseases.

The applicant assessed potential effects on 16 community drinking water supplies that are located within the district and are recognised in the Regional Plan Water and/or are recognised as registered supplies in accordance with the NES for Drinking Water. Most of these supplies are owned and managed by the applicant. The applicant has considered the risk of a discharge impacting each of the water sources based on the proximity to a potential overflow site. In most cases the applicant has considered that the risk of an overflow contaminating any water sources for community supply is low to nil. Where there would be risk of contamination following an overflow, the applicant considers that the adherence with Water Safety Plans as required as being a registered water supply accounts for avoidance and mitigation of the potential effects on human health.

To mitigate and avoid adverse effects, where the drinking water supply is operated by the applicant, they propose to cease abstracting water as soon as an overflow that may affect the supply becomes apparent. In some cases, contingency supply may be necessary. For drinking water supplies that are not operated by the applicant, they propose to notify the operator in an event where the overflow may have significant adverse effects in a procedure similar to that of Section 12 of the NES for Drinking Water. A condition of consent has not been proposed for this, however this may be accounted for through the incident response process and any legal obligations of the applicant to supply potable water.

The applicant has considered the effects other lawful takes of water for potable use in accordance with either Section 14(3)(b)(i) of the Act or the permitted activity rules of the Regional Plan Water. These water takes are commonly located in less populous areas, where there is no reticulated wastewater network nearby. The separation distance between the private supplies and the QLDC wastewater network reduces the risk of being affected by an overflow. Private water takes from the lakes and rivers are typically untreated and therefore the applicant considers that risk of contamination even without a wastewater overflow occurring is already existing. To mitigate effects on these water users, the applicant proposes to notify all potentially affected water users following an overflow event similar to notification requirements in accordance with Section 12 of the NES for Drinking Water. In a significant discharge event, notification may be communicated via social and traditional media. This notification has not been proposed as a condition of consent, however this may be accounted for through the incident response process.

Overall, the applicant has considered that subject to the proposed mitigation measures, the effects on drinking water supplies will be less than minor.

A number of submitters opposed the discharge due to the potential adverse effects on drinking water supplies. These submitters included Te Rūnanga o Ngāi Tahu, Central Otago District Council and Suzanne Kolff.

In our opinion, the assumptions about effects on potable water supply made by the applicant are valid, however given there is insufficient evidence to qualify the frequency and duration of the discharge, it must be assumed that discharges may occur in close proximity to drinking water supplies which could give rise to significant adverse effects. It is therefore considered that the effects on human drinking water are more than minor and potentially significant. It is suggested that conditions could be put forward by the applicant to enshrine a clear response with regard to drinking water supplies.

8.1.2.2 Effects on recreational users

Where a discharge occurs, there is potential for adverse effects to the general public who are in contact with the contaminated water. Given the uncertainty of where a discharge may occur and for how long it will occur there is a high level of risk to the

public. Contact with this contaminated water can lead to a number of human health effects including viral infections such as norovirus and bacterial infections such as campylobacter. Dr Neale Hudson of NIWA provided a public health assessment on behalf of the applicant. This assessment is contained within Appendix D of the Assessment of Environmental Effects. As with the assessment from Dr Olsen, due to the lack of data Dr Hudson's assessment is a risk based. As the assessment is based on modelling, several assumptions have been made. These include (but are not restricted to):

- the nature of contact recreation (swimming, or activities likely to lead to full immersion);
- the duration of swimming;
- a typical concentration range of the selected model pathogen based on New Zealand and overseas measurements of untreated wastewater; and
- use of norovirus as the model pathogens.

NIWA concluded in their assessment that risk to public health is low subject to the applicant's recommended incident response plan. The applicant has confirmed that this response plan will be adhered to. The applicant has considered the effects on public health (for recreational users) in Section 5.4 of the Assessment of Environmental Effects. This assessment relies on the conclusions made by NIWA and determines that subject to the incident response plan and planned upgrades to wastewater infrastructure, effects on public health will be no more than minor.

Submitters expressed concern over the effects to public health as a result of the discharge. Many identified that effects could be significant. Included in these submissions were a number of community groups and recreational clubs that regularly interact with the receiving water bodies.

Dr Michael Greer has reviewed the assessments provided by the applicant and NIWA and again considers that while assessment from NIWA effectively outlines the risk, there is insufficient evidence to quantify and qualify the effect. Consequently the effects are uncertain, more than minor and potentially significant.

8.1.3 Effects on Groundwater

When a discharge occurs, it is likely that it would first discharge to the surrounding land and has the potential to contaminate underlying groundwater. Should the groundwater become contaminated, its potential use is compromised.

The applicant has not directly considered the effects on groundwater, other than Section 5.4.1 of the AEE that considers effects on 6 community drinking water supplies. Consideration of effects on drinking water supplies, including those from groundwater, are discussed above.

Adverse effects on groundwater are dependent on the permeability of the soil that it is discharged to, as well as the volume and the duration of the discharge. Adverse effects are dependent on the current and (potential) future use of the receiving groundwater. As a discharge would generally occur within a urban area, the discharge is likely to be mostly or fully contained within impervious drains and channels. In these areas, groundwater is unlikely to be of high use. Consequently, effects are likely to be no more than minor.

Given the discharge may occur at any point along the wastewater infrastructure, there is potential for discharges to occur to permeable land that results in contaminants being lost to ground water. Several aquifers are particularly sensitive to such effects (groundwater protection zones), or there are a number of water users that may be

affected. Without further specific assessment on locations of potential overflows in relation to these aquifers (which is impractical given the general nature of the activity proposed), it must be assumed that the adverse effects on groundwater are uncertain and may be more than minor.

8.2 Effects on Amenity Values

Amenity values are defined in both the RPW¹² and the Act¹³ as: *Those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes.*

Amenity values of the receiving water bodies are discussed in Section 7 of this report. Of particular note are the outstanding natural features identified in Schedule 1D of the RPW, including the wild and scenic values of the Shotover River, Kawarau River and Lakes Wakatipu, Wanaka and Hāwea. These significant values are relied upon for Queenstown's thriving tourism industry. These significant values were observed by the judge in the prosecutions for overflow discharges to the Kawarau River and Lake Wakatipu.

Submitters indicated in their opposition that the discharge would have detrimental effects on amenity values, particularly the Lakes. Reference is made to the significant consequence this may have on tourism and the enjoyment of the 'pristine' environments that Queenstown is renowned for. This does not necessarily refer to the discharge occurring, rather the perception of its authorised nature that the discharge permit would provide e.g. 'licence to pollute'.

The applicant has considered the effects on amenity values in Section 5.5 of the AEE. This assessment considers amenity values in three facets – recreational, odour and visual.

The definition of the amenity values as outlined above categorises amenity values into four attributes: pleasantness; aesthetic coherence; cultural and recreational. We will provide an assessment against each of these attributes below.

8.2.1 Pleasantness

As indicated above, several submissions opposed the application for the detrimental effects it may cause to the pleasantness of the major lakes and rivers of the district. This indicates the high value the public puts upon the pleasantness of the district's waterbodies. Granting the consent would lead to the potential discharge of human wastewater to these pristine environments thereby degrading their pleasantness.

Numerous submitters referenced their opposition to the idea of the applicant having a 'licence to pollute'. The effect of this perception should be considered as this can adversely affect the pleasantness of an area, particularly due to the long-term nature of the discharges. Many of the receiving water bodies are renowned for their naturalness and are often used to promote both the region and the country's tourism industry. Authorising the discharge could diminish the perceived naturalness of the receiving waterbodies thereby damaging the image relied upon by the tourism industry.

¹² Chapter 20 (Glossary) of the Regional Plan Water for Otago

¹³ Section 2 of the Act

The applicant has not specifically considered pleasantness, however has considered the effect of odour which is one aspect going to the pleasantness of one's experience of a location. It was concluded that the effect would be short-term, localised and minor through proposed conditions to mitigate and remedy such effects.

In terms of odour, given the localised potentially short-term nature of its effect, we agree that effects would be unlikely to be more than minor. However, in relation to pleasantness, we consider that based on the long-term nature of the activity and the clear opposition as outlined in the sheer number of submissions, adverse effects could be more than minor.

8.2.2 Aesthetic coherence

In terms of aesthetic coherence or visual amenity, the discharge will cause at least localised adverse effects on visual amenity. The degree of this effect will depend on the nature of the receiving waterbody and the duration of the discharge. As noted, a number of waterbodies are identified in Schedule 1A as containing outstanding natural features in relation to their visual amenity. These outstanding natural features support a thriving tourism industry both locally and nationally. A number of these water bodies are therefore sensitive to effects on their visual amenity.

In the prosecution for the discharge into the Kawarau River, it was noted that the discharge was visually identified by a jet boat operator. It can be assumed that an event of this significance is unlikely (although cannot be ruled out) to occur with the added monitoring that has been implemented by the applicant, in particular alarm warnings on pump stations. The applicant concluded in its assessment that while adverse effects cannot be avoided, they can be mitigated and remedied to reduce the effects to a degree that, although more than minor, is less than significant. With respect to visual amenity, we disagree with this conclusion, as any visual discharge into an outstanding natural waterbody has potential for significant effects.

8.2.3 Cultural

Cultural amenity values have been outlined in Section 7 of this report, a Cultural Values Statement and within the submissions of mana whenua. With respect to Schedule 1D, this is closely aligned with mauri (life force), waahi tapu (sacred places) and waahi taoka. The discharge will affect and degrade these values. The submissions from Te Rūnanga o Ngāi Tahu, Aukaha on behalf of Kāti Huirapa Rūnaka ki Puketeraki and Te Rūnanga o Ōtākou, and Te Ao Mārama Incorporated on behalf of Te Runanga o Oraka Aparima, Hokonui Runanga and Waihopai Runaka referenced the adverse effects on cultural amenity values indicating a more than minor adverse effect. We agree with this assessment. Further discussion of the actual and potential effects on cultural values is provided in Section 5.3 of this report.

8.2.4 Recreational

Recreational values are discussed in Sections 7 and 8 of this report; of particular note are the significant recreational values identified in Schedule 1A of the RPW that include fishing, rafting, kayaking and jet boating. Other recreational values that exist include swimming and other water sports.

Submissions in opposition raising recreational effects were received from Otago Fish and Game Council, Lake Wakatipu Anglers Club, Southern Lakes Swimming Club and New Zealand Deer Stalkers Association. These groups in their submissions referenced the potential effects on their respective recreational values. Other submitters implicitly indicated their concern for other recreational values e.g. swimming.

The applicant has considered this effect on recreational values and considered that due to the infrequent and short-term nature of the discharges, effects on recreational values are transient and not more than minor.

Effects on recreational fishers are closely related to the potential effects on aquatic ecology. Otago Fish and Game in their submission raised concern of the potential effects on juvenile trout which may be more vulnerable. Other water sport recreational activities are also closely aligned with the effects on water quality and human health.

As outlined in Section 8.1, there is insufficient information regarding the actual and potential effects, consequently it must be assumed the discharge could cause a more than minor adverse effect on water quality.

The discharge will cause an adverse effect on recreational values, particularly the residual effect following a discharge to a particular area known for recreation e.g. swimming hole. The potential effect of this is difficult to quantify due to the uncertain nature of the discharge. Although there is a low risk of a discharge occurring to an area known for particular values, the effect, though short-term, could be significant.

The assessment undertaken by NIWA for the applicant considers the potential effects on public health, specifically swimming. While Dr Greer agrees with the assumptions made that risk is low, they consider that there is insufficient data to verify this assessment and quantify the effect. Consequently, adverse effects on recreational users could be more than minor and potentially significant.

Overall, we consider the adverse effects on recreational values to be more than minor.

8.3 Effects on Cultural Values

Schedule 1D of the RPW identifies cultural and spiritual values for lakes and rivers throughout Otago. The values associated with the various receiving waterbodies are described in Section 8 of this report. Further to this, the applicant commissioned a Cultural Values Statement (CVS) that was prepared by Aukaha which has identified that the receiving water bodies are of strong cultural significance.

In the Ngāi Tahu Claims Settlement Act (1998), the Clutha River/Mata-Au, Lake Wakatipu, Lake Hawea and Lake Wanaka are identified as areas subject to Statutory Acknowledgement. Many of the other rivers subject to the application are tributaries of these water bodies. The CVS outlined the responsibilities of the applicant (and Consent Authority) to consider Kāi Tahu values as identified in Iwi Management Plans in relation to the activity that may diminish these values. The relevant Iwi Management Plans indicate that Māori generally oppose the concept of discharges into any water body, particularly where the discharge contains human waste. Such discharges impact on the mauri (life-force) of the waterbody as well as access and customary use values such as mahika kai and kohanga¹⁴.

The applicant provided an assessment of the effects on cultural values in Section 5.6 of the AEE and an additional assessment following a request for information in accordance with Section 92(1) of the Act. The assessment acknowledges that discharging untreated wastewater into waterbodies is unacceptable to iwi and that discharges will have an immediate effect on the waterbodies in terms of the values that are important to Kāi Tahu. The applicant does not specify the degree of this effect (which is understandable given the generic nature of the application), however it is implied that adverse effects are likely to be at least minor in many cases. The

¹⁴ Schedule 1D of the Water Plan.

applicant considers that these adverse effects can only be mitigated through minimising the likelihood of overflows occurring over time, preventing those overflows from reaching water and remediating the water and surrounding environment (to the extent practicable) immediately following an overflow event occurring. The applicant has proposed this mitigation through conditions of consent.

Submissions were received from Te Rūnanga o Ngāi Tahu; Aukaha on behalf of Kāti Huirapa Rūnaka ki Puketeraki and Te Rūnanga o Ōtākou; and Te Ao Mārama Incorporated on behalf of Te Runanga o Oraka Aparima, Hokonui Runanga and Waihopai Runaka. Each of the submissions opposed the application being granted. This was due to the health and environmental impacts on the catchment within an area of significant cultural landscape. Furthermore the consent term sought of 35 years was also opposed and it was also identified that there should be a reduction in unplanned discharges.

We agree with the assessments of mana whenua and consider that the adverse effects of allowing the proposed activity on cultural values are likely to be more than minor.

8.4 Economic Effects

Queenstown supports a thriving tourism industry that utilises the lakes and rivers of the district. This tourism industry forms a large part of the district's gross domestic product.

The discharge may have a damaging effect to both the tourism industry and other commercial activities by degrading water quality and the naturalness of the waterbodies, thereby effecting their economic wellbeing. In addition to this, the perception of the proposed discharges being enabled through a resource consent is damaging. Potential effects on commercial users were illustrated in the prosecution for the discharge to the Kawarau River. As a jet boat tour operator discovered the discharge, it is likely that the passengers witnessing this discharge would have incurred an adverse effect on the jet boat operation. This was inferred by the Judge in the prosecution¹⁵. The applicant has not specifically addressed such effects in the assessments supporting its application.

Many submitters also raised concern over the detrimental effects the discharge would have on the district's tourism industry.

The adverse effects on commercial values are difficult to quantify, and it is unlikely that the discharge would cause a more than minor effect on overall tourism values of the district. However, given the applicant has not accurately quantified the frequency, location and duration of the discharges, adverse effects could become more than minor.

8.5 Positive Effects

The applicant has described the positive effects of the application in Section 5.2 of their Assessment of Environmental Effects. This assessment is not in dispute and is adopted here.

Submitters have acknowledged the positive effects of the granting the consent on the basis that management of such discharges moves from reactive (prosecutions/enforcement) to proactive (requirements of consent conditions). Submitters have also identified the positive effect on the rate payers of the district in

¹⁵ Paragraph 11 of the sentencing notes

that the cost burden associated with prosecutions and infringement notices will be reduced by authorising the discharge through a consent.

We consider that there are several positive effects including those outlined above. In particular, the main positive effect of granting a consent for the discharges is the ability for the discharges to be better managed and the potential for a reduction in the frequency of discharges. However, these activities can be undertaken voluntarily without having a resource consent so are not considered to be positive effects on the environment as a result of the activity.

8.6 Cumulative effects

In accordance with Section 3 of the Act, the definition of 'effect' includes *any cumulative effect which arises over time or in combination with other effects*.

In terms of the proposed discharge, cumulative effects could occur in two forms:

1. In combination with other lawful activities; and
2. A number of successive overflows to a receiving water body leading to incremental degradation.

The applicant has considered the cumulative effects of the discharge in Section 5.7 of its Assessment of Environmental Effects. We are in general agreement with the assessment, however we do not consider that the applicant has proposed adequate measures to manage these cumulative effects.

A number of submitters raised concerns over the potential for cumulative effects and the lack of management proposed to deal with these cumulative effects. Notably, Otago Fish and Game raised concern over the potential for such cumulative effects in combination with other lawful activities. Two examples were provided:

- potential discharges to Bullock Creek which in combination with other associated discharges of sediment from the bordering subdivisions, could result in significant effects; or
- discharges to waterbodies where water abstractions cause flow to lower reducing the potential dilution component and increasing the potential effect.

We consider that both forms of cumulative effects could occur. The applicant has advised that the frequency of the discharges is likely to be irregular, and they will occur randomly at a variety of locations. Through planned improvements the applicant considers that the frequency and duration of discharges is likely to decrease throughout the proposed term. As outlined in Section 8.1, there is a lack of credible data to support the applicant's assumption of an infrequent and random discharge. Therefore, it must be assumed that a number of successive discharges could occur to a singular receiving water body. In relation to the planned upgrades, the applicant's proposed conditions do not require improvements to be made or a reduction to the discharge frequency.

Overall, we consider that there is potential for cumulative effects that could result in significant adverse effects. We do not consider that the applicant has proposed adequate measures to manage these cumulative effects.

8.7 Alternatives

The applicant has considered alternatives to the discharges proposed, as reported in Section 6.3 of its AEE along with Section 6 of Appendix F. The applicant considers that the only alternative would be to rebuild the wastewater network to modern standards. Even then, the applicant considers that this would reduce overflows, rather

than eliminate them. The cost involved with this would obviously be significant and prohibitive. Overall, the applicant considers that the proposed approach of managing the discharge through quick response and by gradually upgrading infrastructure is the best practicable option.

Many submitters have raised concern over the lack of alternatives considered by the applicant. Many have suggested alternatives such as containment and other mechanisms to avoid the discharge entering a water body.

We agree with the applicant that replacing all infrastructure would come at a prohibitive cost and would be unlikely to eliminate the discharges. However, we consider that the applicant has not adequately assessed all alternatives. The proposed application looks at upgrading infrastructure gradually and over a long period of time. Consideration has not been given to short-term and progressive upgrades. In terms of the alternatives suggested by submitters such as containment, without understanding the specifics of the 47 potential discharge points in the wastewater system, we are unable to comment further on its practicality in each case. This may be a viable alternative in some instances that can at least mitigate the effects of the discharge. It is suggested that the applicant provide comment on such alternatives.

9. Section 104 Evaluation

Section 104 of the Act requires consideration of the effects of the application and relevant policy and plan provisions, subject to Part 2 of the Act. Case law has emphasised the importance of not discounting the provisions of the regional plans (and the other instruments listed in s104) in favour of an 'overall broad judgement', given that those instruments have been developed to give effect to Part 2 matters in an integrated way. That said, the Court of Appeal in *Davidson* has confirmed that recourse can be had to Part 2 matters in deciding a resource consent application under Section 104.

The remaining matters of Section 104 to be considered when assessing an application for a resource consent are:

- (a) the actual and potential effects on the environment of allowing the activity;
- (ab) any measure proposed or agreed to by the applicant for the purpose of ensuring positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from allowing the activity
- (b) any relevant provisions of a national environmental standard, other regulations, a national policy statement, the Regional Policy Statement (RPS), the Regional Plan: Water (RPW); and
- (c) any other matter the Council considers relevant and reasonably necessary to determine the application.

9.1.1 S104(1)(a) – Actual and potential effects on the environment of allowing the activity.

The actual and potential environmental effects of the proposed activity are considered in Section 8 of this report. Overall, we consider that the actual and potential adverse effects of the activity are largely unknown, but likely to be more than minor and potentially significant.

9.1.2 S104(1)(ab)

Section 104(1)(ab) of the Act requires the consent authority to have regard to any proposed measures to offset or compensate any adverse effects on the environment that will or may result from allowing the activity. The applicant has not offered any measure to offset or compensate for the likely adverse effects.

9.1.3 S104(1)(b) Relevant Planning Documents

The relevant planning documents in respect of this application are:

- The Regional Plan: Water for Otago
- The Regional Policy Statement and Proposed Regional Policy Statement
- The National Policy Statement for Freshwater Management
- The National Policy Statement for Urban Development Capacity 2016
- The National Environmental Standard for Sources of Human Drinking Water

Brief comment is provided in respect of each of these documents below.

9.1.4 Regional Plan: Water for Otago (RPW)

The RPW specifies issues, objectives and policies that address water quality issues. The applicable chapters subject to this application are Chapter 4: Kāi Tahu ki Otago Water Perspective; Chapter 5: Natural and human use values of lakes and rivers; Chapter 7: Water Quality and Chapter 9: Groundwater. A discussion of the relevant policies from each of these chapters is provided below.

Chapter 4 Kāi Tahu ki Otago Water Perspective

4.13 Issues of Concern to Kāi Tahu

4.13.5 *Discharge of human waste and other contaminants to Otago's water bodies from point and non-point sources is an affront to Kāi Tahu.*

The proposal to discharge untreated wastewater to waterbodies is particularly offensive to Kāi Tahu. This is evidenced through the submission received from Kāti Huirapa Rūnaka ki Puketeraki and Te Rūnanga o Ōtākou in opposition to the proposal.

Chapter 5: Natural and human use values

Policy 5.4.1 *To identify the following natural and human use values supported by Otago's lakes and rivers, as expressed in Schedule 1:*

- (a) *Outstanding natural features and landscapes;*
- (b) *Areas with a high degree of naturalness;*
- (c) *Areas of significant indigenous vegetation, significant habitats of*
 - (i) *indigenous fauna, and significant habitats of trout and salmon;*
- (d) *Ecosystem values;*
- (e) *Water supply values;*
- (f) *Registered historic places; and*
- (g) *Spiritual and cultural beliefs, values and uses of significance to Kāi Tahu.*

The receiving environment for the applicant's proposed discharges includes lakes and rivers that contain all of the aforementioned Schedule 1 natural and human use values, except for areas containing a high degree of naturalness. These values add to the sensitivity of the receiving environment. By these values being identified in the Plan it is clear they are of importance to the community.

Policy 5.4.2 *In the management of any activity involving surface water, groundwater or the bed or margin of any lake or river, to give priority to avoiding, in preference to remedying or mitigating:*

- (1) *Adverse effects on:*
 - (a) *Natural values identified in Schedule 1A;*

- (b) *Water supply values identified in Schedule 1B;*
 - (c) *Registered historic places identified in Schedule 1C, or archaeological sites in, on, under or over the bed or margin of a lake or river;*
 - (d) *Spiritual and cultural beliefs, values and uses of significance to Kāi Tahu identified in Schedule 1D;*
 - (e) *The natural character of any lake or river, or its margins;*
 - (f) *Amenity values supported by any water body; and*
- (2) *Causing or exacerbating flooding, erosion, land instability, sedimentation or property damage.*

The proposal is to discharge wastewater to land in a manner that enters surface water. In accordance with this policy, priority should be given to avoid in preference to remedying or mitigating adverse effects on the Schedule 1A, B and C values of the receiving environment. In the case of *New Zealand King Salmon vs Marlborough District Council*¹⁶ the Supreme Court considered the meaning of the word 'avoid' and held that it has its ordinary meaning of 'not allow' or 'prevent the occurrence of'. Hence priority should be given to not allowing in preference to remedying or mitigating.

It is acknowledged that discharges from wastewater infrastructure, in a general sense, are unavoidable. However, as the applicant is seeking a generic consent to discharge wastewater, in preference to remedying or mitigating its effects, means the proposal is inconsistent with this policy.

Policy 5.4.3 *In the management of any activity involving surface water, groundwater or the bed or margin of any lake or river, to give priority to avoiding adverse effects on:*

- (3) *Existing lawful uses; and*
- (4) *Existing lawful priorities for the use, of lakes and rivers and their margins.*

Water is generally of a good quality in the proposed receiving environments. There are a number of identified drinking water supplies and an unknown number of other lawful drinking supplies such as permitted activities for stock water drinking, which may be adversely impacted upon by the discharge. As the applicant is not giving priority to preventing adverse effects on these water supplies, the proposal is inconsistent with this policy.

Policy 5.4.4 *To recognise Kāi Tahu's interests in Otago's lakes and rivers by promoting opportunities for their involvement in resource consent processing.*

The applicant recognised Kāi Tahu's interests by engaging with Aukaha and TAMI prior to notification. Te Runanga o Ngāi Tahu, Aukaha and TAMI all have submitted in opposition to the application. We therefore consider the application is consistent with this policy.

Policy 5.4.9 *To have particular regard to the following qualities or characteristics of lakes and rivers, and their margins, when considering adverse effects on amenity values:*

- (a) *Aesthetic values associated with the lake or river; and*
- (b) *Recreational opportunities provided by the lake or river, or its margins.*

¹⁶ *Environmental Defence Soc Inc v The New Zealand King Salmon Co Ltd* [2014] NZSC 38

As identified in Section 8.2.2 of this report the aesthetic values of the receiving waters will potentially be seriously affected. Furthermore, a number of these receiving environments are used for recreational purposes, such as swimming and fishing. Proposing to continue discharging the untreated wastewater periodically over a 35-year term is inconsistent with the direction to consider these values or opportunities. Hence the proposal is considered to be inconsistent with this policy.

Chapter 7: Water Quality

Policy 7.B.1 *Manage the quality of water in Otago lakes, rivers, wetlands and groundwater by:*

- (a) Describing, in Table 15.1 of Schedule 15, characteristics indicative of good quality water; and*
- (b) Setting, in Table 15.2 of Schedule 15, receiving water numerical limits and targets for achieving good quality water; and*
- (c) Maintaining, from the dates specified in Schedule 15, good quality water; and*
- (d) Enhancing water quality where it does not meet Schedule 15 limits, to meet those limits by the date specified in the Schedule; and*
- (e) Recognising the differences in the effects and management of point and non-point source discharges; and*
- (f) Recognising discharge effects on groundwater; and*
- (g) Promoting the discharge of contaminants to land in preference to water.*

Schedule 15 outlines receiving water numerical standards and catchment timeframes for achieving good quality water. The Kawarau River and Luggate Creek are in receiving Water Group 2, Bullock Creek and Horne Creek are in receiving Water Group 3, whilst Lakes Wakatipu and Wanaka are in receiving group 5.

The limits for Groups 2 and 3 are measured using 5-year 80th percentile values when water flow is at or below median. Whilst the limits for Group 5 are measured using a 5 year 80th percentile value.

Except for the Total Phosphorous level in Lake Wakatipu, all other waterbodies have schedule 15 target dates of 31 March 2012, as the respective concentration limits were met at 31 March 2012.

As the applicant has not been able to identify where any particular discharge will occur, or quantify or otherwise categorise the nature of each discharge, there can be no assurance that the water quality limits, particularly in the smaller receiving water bodies, will be maintained (although it is accepted, given the dilution available in the larger water bodies, that some discharges may not cause the water quality limits to be breached). Furthermore, as the proposal is to discharge to water instead of via land absorption systems, it is inconsistent with this policy.

Policy 7.B.2 *Avoid objectionable discharges of water or contaminants to maintain the natural and human use values, including Kāi Tahu values, of Otago lakes, rivers, wetlands, groundwater and open drains and water races that join them.*

Due to its nature, the discharge is 'objectionable'. This is evident by the overwhelming majority of submitters, including mana whenua, opposing the application due to the discharge's offensive nature. The policy states to 'avoid' such discharges.

As the applicant is applying to allow an objectionable discharge that will adversely affect the natural and human use values of the various receiving environments the activity is inconsistent with this policy.

Policy 7.B.3 Allow discharges of water or contaminants to Otago lakes, rivers, wetlands and groundwater that have minor effects or that are short-term discharges with short-term adverse effects.

As discussed in Section 8.1 of this report, adverse effects are considered more than minor and potentially significant. Although the discharges from overflows are assumed to be of short-term duration, there is insufficient evidence to confirm this. The discharge cannot be considered consistent with this policy.

Policy 7.B.6 When assessing any consent to discharge contaminants to water, consider the need for and the extent of any zone for physical mixing, within which water will not meet the characteristics and limits described in Schedule 15, by taking account of:

- (a) The sensitivity of the receiving environment; and*
- (b) The natural and human use values, including Kāi Tahu values; and*
- (c) The natural character of the water body; and*
- (d) The amenity values supported by the water body; and*
- (e) The physical processes acting on the area of discharge; and*
- (f) The particular discharge, including contaminant type, concentration and volume; and*
- (g) The provision of cost-effective community infrastructure; and*
- (h) Good quality water as described in Schedule 15.*

Reasonable mixing is considered to be the point between where the discharge occurs and the point at which the effluent is completely mixed with the receiving water. The applicant has been unable to define the reasonable mixing zone, given it cannot quantify the volume or location of the discharge. As such the proposal is inconsistent with this policy.

Policy 7.B.8 Encourage adaptive management and innovation that reduces the level of contaminants in discharges.

The applicant is proposing to continue discharging untreated wastewater whilst it undertakes a monitoring and maintenance programme. Proposed conditions of consent do not require progressive upgrades or a reduction in the overflow frequency through the proposed term. As the applicant is not proposing any adaptive management measures or innovative upgrades to reduce the level of discharge, the proposal is considered inconsistent with this policy.

Policy 7.C.2 When considering applications for resource consents to discharge contaminants to water, or onto or into land in circumstances which may result in any contaminant entering water, to have regard to:

- (a) The nature of the discharge and the sensitivity of the receiving environment to adverse effects;*
- (b) The financial implications, and the effects on the environment of the proposed method of discharge when compared with alternative means; and*
- (c) The current state of technical knowledge and the likelihood that the proposed method of discharge can be successfully applied.*

The proposed discharge of untreated wastewater to waterbodies that contain high Schedule 1A values and the potential for the discharge to cause adverse commercial and therefore financial effects as outlined in Section 8.4, means that the proposal is inconsistent with this policy. There is also a high degree of uncertainty over the scale and scope of the discharges that is inappropriate in such a sensitive receiving environment.

Policy 7.C.3 *When considering any resource consent to discharge a contaminant to water, to have regard to any relevant standards and guidelines in imposing conditions on the discharge consent.*

Relevant standards have been considered, including relevant health and freshwater ecology standards. Due to the unknown and potentially significant adverse effects of the discharge, the standards and guidelines are unlikely to be met. Conditions have not been proposed to manage the quality of discharge, nor could conditions be imposed due to the uncontrollable nature of the discharge.

Policy 7.C.4: *The duration of any new resource consent for an existing discharge of contaminants will take account of the anticipated adverse effects of the discharge on any natural and human use value supported by an affected water body, and:*

- (a) Will be up to 35 years where the discharge will meet the water quality standard required to support that value for the duration of the resource consent;*
- (b) Will be no more than 15 years where the discharge does not meet the water quality standard required to support that value but will progressively meet that standard within the duration of the resource consent;*
- (c) Will be no more than 5 years where the discharge does not meet the water quality standard required to support that value; and*
- (d) No resource consent, subsequent to one issued under (c), will be issued if the discharge still does not meet the water quality standard required to support that value.*

The applicant is seeking a 35-year term for the discharge of untreated wastewater into water bodies that have good water quality and various important natural human use values. As outlined in Section 8.1, it cannot be confirmed that in all situations the discharge will meet the water quality standards required to support these values. Consequently the proposed discharge is inconsistent with this policy.

Chapter 9 Groundwater

Policy 9.4.18 *To identify land of high risk in terms of the vulnerability of underlying groundwater to leachate contamination and to manage, with respect to this land:*
(c) Point source discharges of water or contaminants to land or groundwater; and

As discussed in Section 8.1.3 the proposal has the potential to contaminate vulnerable aquifers. The level of contamination is unknown and could be significant. Consequently, the proposal is inconsistent with this policy.

9.1.5 Regional Policy Statement for Otago, proposed Regional Policy Statement and Partially Operative Regional Policy Statement

The Otago Regional Policy Statement was first made operative in 1998. The Council has recently undertaken a review of the Regional Policy Statement and a decision on the proposed Regional Policy Statement (pRPS) was released on 1 October 2016. This decision was appealed. Since the appeals, a number of matters have been resolved and Council have released a Partially Operative Regional Policy Statement (PO-RPS) that contains all provisions that are no longer subject to appeal. All other

provision that are subject to an appeal remain proposed. The relevant provisions of the RPS, pRPS and PO-RPS are outlined and assessed below.

9.1.5.1 Regional Policy Statement for Otago (RPS)

The provisions of Chapter 6 (Water), of the operative RPS is relevant to this application. Sections that have been revoked and replaced by Partially Operative Regional Policy Statement the have been struck out.

- **Policy 6.5.5:** To promote a reduction in the adverse effects of contaminant discharges into Otago's water bodies through:
 - (a) Adopting the existing water quality of Otago's water bodies as a minimum acceptable standard; and
 - (b) Investigating and where appropriate, enhancing water quality so that as a minimum standard it is suitable for contact recreation and aquatic life where:
 - (i) There is a high public interest in, or use of the water; or
 - ~~(ii) There is a particular Kai Tahu interest in the water; or~~
 - (iii) There is a particular value to be maintained or enhanced; or
 - (iv) There is a direct discharge containing human sewage or wastes from commercial or industrial activities; and
 - (c) Requiring that all discharges into Otago's water bodies maintain the standard for the receiving waters after reasonable mixing; and
 - (d) Promoting discharges to land where practicable and where there are no significant adverse effects on groundwater or surface water resources, or soil; and
 - (e) Preparing contingency responses for accidental pollution spills; and
 - (f) Investigating and addressing the effects of diffuse source discharges on water quality;while considering financial and technical constraints.

As previously stated, the discharge of untreated wastewater is contradictory to parts (a) (b) (c) (d) as water quality is not likely to be maintained in respect of any but the most small-scale and short term of discharges proposed to be enabled by the consent. It is acknowledged that there may be financial and technical constraints to ceasing the discharges. However, as the applicant has been aware of this unacceptable discharge for many years, it is not unreasonable to expect that steps should have been previously implemented to resolve this issue. Accepting that completely overhauling the system would have a prohibitive cost, seeking to enable all discharges through a consent does not appear to be contemplated or supported by this policy. Consequently, the proposal is inconsistent with this policy.

9.1.5.2 Partially Operative Regional Policy Statement 2019 (PORPS)

The proposed Regional Policy Statement (pRPS) was notified on 23 May 2015 and a decision was released 1 October 2016. The pRPS was made partially operative on 14 January 2019. The provisions that are the subject of court proceedings and are not made operative are shaded in grey below. Full consideration is given to the operative provisions of the PORPS. Weighted consideration is given to the provisions that have not been made operative in conjunction with the remaining operative provisions of the RPS, outlined above.

- Provide for the economic wellbeing of Otago's people and communities by enabling the resilient and sustainable use and development of natural and physical resources (Policy 1.1.1)

As outlined in Section 8.4, the ongoing discharge of untreated wastewater to the district's waterbodies could seriously affect its economic wellbeing, as it is heavily reliant upon the tourism industry. However, it can also be observed that a complete overhaul of the applicant's wastewater infrastructure may come at a prohibitive cost. Therefore though we do not consider that the application is consistent with this policy, it is also not contrary to it.

- Provide for social and cultural wellbeing and health and safety by recognising and providing for Kāi Tahu values; taking into account the values of other cultures; taking into account the diverse needs of Otago's people and communities; avoiding significant adverse effects of activities on human health; promoting community resilience and the need to secure resources for the reasonable needs for human wellbeing; promoting good quality and accessible infrastructure and public services (Policy 1.1.2)

The applicant has recognised the relationship Kāi Tahu have with the region's natural and physical resources through consultation and by obtaining a cultural values statement. However, as the applicant is seeking to continue discharging untreated wastewater for a 35-year term rather than trying to eliminate it, the discharge does not provide for social and cultural wellbeing or the health and safety of the community. Hence the proposal is inconsistent with this policy.

- Taking the principles of Te Tiriti o Waitangi into account including by involving Kāi Tahu in resource management processes implementation, having particular regard to the exercise of kaitiakitaka and taking into account iwi management plans (Policy 2.1.2)

A number of the receiving environments are identified in Schedule 1D of the RPW as containing spiritual or cultural beliefs, values or uses of significance to Kāi Tahu. The proposal, to discharge human waste throughout the district for 35 years does not either; have regard to the exercise of kaitiakitaka or take into account iwi management plans. Consequently, the proposal to discharge untreated wastewater to waterbodies in opposition to mana whenua wishes is inconsistent with this policy.

- Managing the natural environment to support Kāi Tahu wellbeing (Policy 2.2.1)

The proposal to discharge untreated wastewater to waterbodies containing various Schedule 1D values is inconsistent with this policy.

- Recognise and provide for the protection of sites of cultural significance to Kāi Tahu including the values that contribute to the site being significant (Policy 2.2.2)

The proposal to discharge untreated wastewater to waterbodies containing various Schedule 1D values is inconsistent with this policy.

- Managing for freshwater values including
 - Maintain or enhance ecosystem health in all Otago aquifers, and rivers, lakes, wetlands, and their margins
 - Maintain or enhance the range and extent of habitats provided by fresh water, including the habitat of trout and salmon
 - Recognise and provide for the migratory patterns of freshwater species, unless detrimental to indigenous biological diversity
 - Avoid aquifer compaction and seawater intrusion in aquifers
 - Maintain good water quality, including in the coastal marine area, or enhance it where it has been degraded

- Maintain or enhance coastal values
- Maintain or enhance the natural functioning of rivers, lakes, and wetlands, their riparian margins, and aquifers
- Maintain or enhance the quality and reliability of existing drinking and stock water supplies
- Recognise and provide for important recreation values
- Maintain or enhance the amenity and landscape values of rivers, lakes, and wetlands
- Control the adverse effects of pest species, prevent their introduction and reduce their spread
- Avoid, remedy or mitigate the adverse effects of natural hazards, including flooding and erosion
- Avoid, remedy, or mitigate adverse effects on existing infrastructure that is reliant on fresh water (Policy 3.1.1)

The proposed discharge of untreated wastewater does not maintain or enhance: ecosystem health, or the range and extent of habitats provided by fresh water, including the habitat of trout and salmon, or the quality and reliability of existing drinking and stock water supplies, or the amenity and landscape values of rivers, lakes, and wetlands.

The proposed discharges will not maintain good water quality, nor recognise and provide for important recreational values. This is because it is for the discharge of wastewater where it may enter water and to water. We can see no way that the application as proposed, especially given the uncertainty of the effects is consistent with this provision. Finally, as it cannot be confirmed that the proposal will not avoid, remedy, or mitigate adverse effects on all existing infrastructure that is reliant on fresh water, the proposal is inconsistent with this policy.

- Identify and protect outstanding freshwater bodies (Policy 3.2.13 & 3.2.14)

The Queenstown Lakes District contains many identified outstanding freshwater bodies. As the proposal does not maintain their outstanding values or avoid, remedy or mitigate adverse effects on the waterbodies, the proposal is inconsistent with this policy.

- Identify and protect the significant values of wetlands (Policy 3.2.15 & 3.2.16)

The Queenstown Lakes District contains several wetlands that would be identified as containing significant values, such as the Lake Hayes Margins Wetlands. Due to the nature of the discharges and uncertainty associated with where and when the discharges may occur the application does not maintain their significant values or encourage enhancement of their values and is inconsistent with this policy.

- Manage discharges that are objectionable or offensive to Kāi Tahu and/or the wider community:
 - a) Avoiding significant adverse effects of those discharges;
 - b) Avoiding significant adverse effects of discharges of human or animal waste directly, or in close proximity, to water or mahika kai sites;
 - c) Avoiding, remedying or mitigating other adverse effects of those discharges (Policy 5.4.1)

The discharge of untreated wastewater is objectionable to Kāi Tahu and the wider community. The applicant proposes to discharge liquid waste to land in a manner that will enter receiving environments that are identified in Schedule 1D of the RPW as containing mahika kai values for a 35-year period. During this period the applicant will monitor and promote best practice to avoid blockages of its network. However, the discharge of human wastewater throughout the district for 35 years does not either

eliminate the disposal of human waste into mahika kai or recognise the need to maintain and enhance mahika kai. Consequently the proposal is inconsistent with this policy.

- Apply an adaptive management approach, to avoid, remedy or mitigate actual and potential adverse effects that might arise and that can be remedied before they become irreversible (Policy 5.4.2)

The applicant is proposing to continue discharging untreated wastewater whilst it undertakes a monitoring and maintenance programme. Proposed conditions¹⁷ of consent do not require progressive upgrades or a reduction in the overflow frequency through the proposed term. As the applicant is not proposing any adaptive management measures or innovative upgrades to reduce the level of discharge, the proposal is considered inconsistent with this policy.

- *Apply a precautionary approach to activities where adverse effects may be uncertain, not able to be determined, or poorly understood but are potentially significant (Policy 4.4.3)*

The application provides very little data regarding the potential effects of the activity, and the data that has been provided cannot be relied upon. The adverse effects are therefore poorly understood and are highly uncertain. In addition to this, adverse effects could be potentially significant in a sensitive receiving environment. This has been observed by experts from both Ryder and Aquanet.

Another indicator of a potentially significant adverse effect is the discharge's inability to meet Section 107 (see Section 9.3 of this report). As this policy is relevant to the application, a precautionary approach must be taken. Based on the long term of consent sought; the uncertainty of effects and their likelihood to be significant; along with the lack of conditions to adequately avoid, mitigate and avoid adverse effects, we do not consider that a precautionary approach has been taken. To grant the consent would therefore be inconsistent with this policy.

9.1.6 National Policy Statement for Freshwater Management

The National Policy Statement for Freshwater Management 2014 (amended 2017) supports improved freshwater management in New Zealand. It does this by directing regional councils to establish objectives and set limits for fresh water in their regional plans. It requires regional councils to recognise the national significance of fresh water for all New Zealanders and Te Mana o te Wai.

A number of submitters commented on the NPS-FM and considered the activity to be contrary to its objectives and policies. The applicant has considered the activity against the provisions of the NPS-FM, in particular Objectives A1, A2 and C1. They have considered that subject to the proposed conditions of consent, the activity is largely consistent with the NPS-FM. We do not agree with this assessment and provide the following comment on each of these objectives.

Objective A1

To safeguard:

- a) the life-supporting capacity, ecosystem processes and indigenous species including their associated ecosystems, of fresh water; and*
- b) the health of people and communities, as affected by contact with fresh water;*

¹⁷ At the time of writing this report

in sustainably managing the use and development of land, and of discharges of contaminants.

It is considered that the proposed discharges of untreated wastewater at multiple locations for unknown lengths of time to sensitive and highly valued waterbodies does not safeguard the life-supporting capacity, ecosystem processes and indigenous species of the receiving waters. The discharges are to waters that are used for various activities that bring people in contact with the water and the uncontrolled discharges do provide not for the health of the community.

Objective A2

The overall quality of fresh water within a freshwater management unit is maintained or improved while:

- a) *protecting the significant values of outstanding freshwater bodies;*
- b) *protecting the significant values of wetlands; and*
- c) *improving the quality of fresh water in water bodies that have been degraded by human activities to the point of being over-allocated*

Though no freshwater management units have been adopted, the proposal to discharge untreated wastewater does not protect or improve the receiving waters of wetlands.

Objective C1

To improve integrated management of fresh water and the use and development of land in whole catchments, including the interactions between fresh water, land, associated ecosystems and the coastal environment.

The proposed discharge does not improve integrated management of fresh water and the use and development of the adjacent land.

The following policies are relevant to this application:

Policy A1: Establishing freshwater objectives and setting water quality limits.

Policy A2: Specifying targets and implementation methods to improve water quality within defined time frames.

Policy A3: Imposing conditions on resource consents to ensure that water quality limits and targets are met.

The policies in the proposed and partially operative RPS, and RPW generally meet the requirements of the NPS-FM. A full review of the RPW is yet to be undertaken to give full effect. Matters that are yet to be accounted for relate primarily to water quantity which is not considered to relevant to these applications.

The provisions of the pRPS, PORPS and the RPW largely address Policies A1 and A2, and therefore Policy A4 is not applicable. The assessment of the activity against the provisions of the pRPS, PORPS and the RPW is provided above indicating the activity is inconsistent with their provisions. In particular the applicant is relying upon dilution of the discharge to ensure water quality water limits are met. The applicant is also not proposing to reduce the volume or quality of the discharge throughout the duration of the sought consent term. In the context of Policy A3, conditions would need to be set to ensure that the limits and targets as outlined in Schedule 15 of the RPW are met. As the discharge is relatively uncontrollable in terms of its quality, such conditions are unable to be implemented.

Based on our assessment above, the application, as applied for, is inconsistent with the NPS-FM.

9.1.7 National Policy Statement for Urban Development Capacity 2016

The National Policy Statement on Urban Development Capacity 2016 (NPSUDC) sets out the objectives and policies on future urban growth and infrastructure capacity on a national basis. In particular, the NPSUDC states an aim of ensuring supply of housing and associated infrastructure to meet the demand.

The Queenstown Lakes District is recognised under this as a 'high growth' area due to an expected population growth of more than 10 percent between 2013-2023. As a result of this, the applicant is required to give effect to all policies and objectives of the NPSUDC.

In relation to consideration that should be given for this application, the following objectives are relevant:

OA1: Effective and efficient urban environments

OA2: Urban environments that have sufficient opportunities for the development to meet the needs of people and communities and future generations.

OA3: Urban environments that, over time, develop and change in response to the changing needs of people and communities and future generations.

Though intended to address land use issues, the operation of an urban wastewater system is directly relevant to the NPSUDC. In a sensitive receiving environment, wastewater systems should be designed and maintained to ensure that they can cater for all reasonably expected eventualities. Systems that are expected to fail on a regular basis, and discharge untreated wastewater to the environment do not provide for communities' current and future social, economic, cultural and environmental wellbeing. Consequently, the proposal is inconsistent with the NPSUDC.

9.1.8 National Environmental Standard for Sources of Human Drinking Water

Regulations 7 and 8 of the National Environmental Standard for Sources of Human Drinking Water (NES) need to be considered when assessing discharge permits that have the potential to affect registered drinking water supplies that provide 501 or more people with drinking water for 60 or more calendar days each year.

Regulations 11 and 12 of the NES requires Councils to place an emergency notification condition on relevant consent holders if it is assessed that the activity could pose a risk to the drinking water supply in the case of an unintended event (e.g., a spill or other accident). If the Council considers that such a risk exists, a condition must be placed on the consents that requires the consent holder to notify the drinking water supplier if such an event occurs. Regulation 11 states that Regulation 12 applies to activities with the potential to affect registered drinking water supplies that supply 25 or more people with drinking water for 60 or more days of a calendar year.

The adverse effects on drinking water supplies, including those recognised under the NES are discussed in Section 8.1.2.1 of this report. As the activity poses a risk of potentially significant adverse effect to drinking water supplies, should the Hearing Panel determine that the application be granted, it is recommended this discharge be subject conditions of consent consistent with Regulation 11 and 12 of the NES.

9.1.9 Section 104(1)(c) Any other matters

9.1.9.1 Ngāi Tahu ki Murihiku Natural Resource and Environmental Iwi Management Plan 2008 – The Cry of the People, Te Tangi a Tauira

The Ngāi Tahu ki Murihiku Natural Resource and Environmental Iwi Management Plan 2008 - The Cry of the People, Te Tangi a Tauira (NTMRP) is considered to be a relevant other matter for the consideration of this application. This is because the RPW is yet to be amended to take into account this Plan and this Plan expresses the attitudes and values of the four Rūnanga Papatipu o Murihiku – Awarua, Hokonui, Ōraka/Aparima and Waihōpai.

The following objectives and policies are of most relevance to this application:

- *Policy 5.3.2.5:* Assess proposed wastewater discharge activities in terms of:
 - type/ nature of the discharge;
 - location and sensitivity of the receiving environment;
 - cultural associations with location of operations;
 - actual and potential effects on cultural values;
 - available best practice technology;
 - mitigation that can occur (e.g. using plants to filter waste, discharging at specific times to minimise impact, treatment options)
 - community acceptability;
 - cost.
- *Policy 5.3.2.6:* Avoid the use of water as a receiving environment for the direct, or point source, discharge of contaminants. Even if the discharge is treated and therefore considered “clean”, it may still be culturally unacceptable. Generally, all discharge must first be to land.
- *Policy 5.3.2.10:* Require that the highest environmental standards are applied to consent applications involving the discharge of contaminants to land or water (e.g. standards of treatment of sewage).
- *Policy 5.3.2.13:* Require the use of buffer zones, bunds and other mechanisms to prevent wastewater from entering waterways.
- *Policy 5.3.2.16:* Require that large scale wastewater disposal operations (e.g. town sewage schemes, industry) develop environmental management plans, including contingency plans to cope with any faults, breakdowns, natural disasters, or extreme weather events (e.g. cash bonds for liability).
- *Policy 5.3.2.18:* Recommend a duration not exceeding 25 years, for discharge consents relating to wastewater disposal, with an assumption that upon expiry (if not before), the quality of the system will be improved as technological improvements become available. In some instances, a lesser term may be appropriate, with a condition requiring the system is upgraded within a specified time period.

The discharge of untreated wastewater to potentially multiple locations, with uncertain effects is inconsistent with all of the above objectives and policies of the NTMRP. This assessment has been confirmed via the submission in opposition received from Rūnanga Papatipu o Murihiku. In particular; the discharge does not have community acceptability, water is being used as a receiving environment, highest environmental standards are not being applied. Furthermore, buffer zones, bunds and other mechanisms are not being used to prevent wastewater from entering waterways and the applicant has sought a consent term that exceeds 25 years. Therefore, the application is inconsistent with the policies and objectives of this plan.

6.1.9.2 The Kāi Tahu ki Otago Natural Resource Management Plan 2005 (NRMP)

The Kāi Tahu ki Otago Natural Resource Management Plan 2005 (NRMP) is considered to be a relevant other matter for the consideration of this application. This is because the RPW is yet to be amended to take into account this Plan and this Plan

expresses the attitudes and values of the four Papatipu Rūnaka: Te Rūnanga o Moeraki, Kāti Huirapa Rūnaka ki Puketeraki, Te Rūnanga o Ōtākou and Hokonui Rūnanga. The following objectives and policies are of most relevance to this application:

- *Objective 5.3.3(i)*: There is no discharge of human waste directly to water.
- *Objective 5.3.3(iii)*: Contaminants being discharged directly or indirectly to water are reduced.
- *Policy 5.3.4.4*: To protect and restore the mauri of all water
- *Policy 5.4.4.7*: To discourage all discharges near wahi tapu.

The discharge of untreated wastewater is inconsistent with the objectives and policies of the NRMP. This assessment has been confirmed via the opposition submission received from Papatipu Rūnaka. In many cases the wastewater, after flowing down roadside guttering, will enter directly to water. There is also no requirement to reduce the discharge of contaminants to water and no proposed requirement for upgrades throughout the term of the consent. Furthermore, the mauri of the water is not being restored or protected and as the location of the discharges have not been identified, it cannot be confirmed that there are no discharges near wahi tapu.

6.1.9.3 Water Conservation (Kawarau) Order 1997

The Kawarau River and Lake Wakatipu are identified as protected waters in Schedule 2 of the Water Conservation (Kawarau) Order 1997 (Conservation Order) attached as Appendix 1 to this report.

The uncontrolled nature of the discharge means that there is no certainty that the water quality in the Kawarau River and Lake Wakatipu will be managed to the required standards at all times. Therefore, the application does not give effect to this order. A consent should not be granted if it is inconsistent with a Water Conservation Order.

6.1.9.4 Lake Wanaka Preservation Act 1973

One of the purposes of this act is to *maintain and, as far as possible, to improve the quality of water in the lake*. It is also noted that the Guardians of Lake Wanaka; submitted in opposition citing concerns about the discharges effect on water quality, biodiversity and ecosystems. An unrestricted discharge of wastewater into Lake Wanaka for 35 years is inconsistent with the purpose of this legislation.

9.1.10 Section 104(6)

Section 104(6) provides discretion for the consent authority to decline an application on the grounds that there is inadequate information to determine the application.

The Hearing Panel may decide that there is inadequate information to sufficiently determine the application and decline on this basis.

As outlined in Section 8 of this report, we have not included Section 104(6) in the reasons for my recommendation to decline the application. The use of this section should be reserved for instances where an applicant has not provided all reasonable information. In this case, we consider that the applicant has provided all reasonable information to enable an assessment to be made. This is regardless of the fact that this information does not provide sufficient evidence to quantify the effect of the discharge.

9.2 Section 105 of the Act

Section 105(1) states for a discharge permit that the Consent Authority shall have regard to:

- (a) the nature of the discharge, the sensitivity of the receiving environment, and the applicant's reasons for the proposed choice; and
- (b) any possible alternative methods of discharge including discharge into any other receiving environment.

The nature of the discharge is described in Sections 4 and 8 of this report. The nature of this discharge is of untreated wastewater, that may include tampons, sanitary towels, toilet paper, wipes and nappies etc, at varying rates, volumes and locations throughout the district. The sensitivity of the receiving environment is outlined in Appendix 2 and Section 8.4 of this report. The receiving environment is considered sensitive and contains several protected and nationally significant waterbodies. The reasons for the proposed choice of the discharge is described in Section 4 of this report. The applicant has stated that the discharges must occur as blockages will naturally occur due to tree roots damaging the pipes and because of people putting unsuitable items into their network.

The consideration of alternatives is provided in Section 8.7 of this report. Overall it is considered that the applicant has not adequately considered all possible alternatives.

9.3 Section 107 of the Act

Section 107(1) of the Act states that a discharge permit shall not be granted (unless the discharge is exceptional, temporary or associated with maintenance works (Section 107(2)) if, after reasonable mixing, the contaminant or water discharged is likely to give rise to all or any of the following effects in the receiving waters:

- The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended material; or
- Any conspicuous change in the colour or visual clarity; or
- Any emission of objectionable odour; or
- The rendering of fresh water unsuitable for consumption by farm animals; or
- Any significant adverse effects on aquatic life.

Reasonable mixing is considered to be the point between where the discharge occurs and the point at which the effluent is completely mixed with the receiving water. The applicant has been unable to define the reasonable mixing zone, given it cannot quantify the volume or location of the discharge.

Dr Greer has considered the discharge against Section 107 of the Act. Dr Greer's full comments are contained within the full assessment as outlined in Appendix 4 of this report. Dr Greer noted that the discharge:

- Will result in the production of oil or grease films, scums or foams, or floatable or suspended materials. However, how conspicuous they will be is dependent on the rate of the discharge in relation to the dilution potential of the receiving water body;
- Will cause an objectionable odour;
- Has the potential to render fresh water unsuitable for consumption by farm animals. However, this will depend on the dilution potential of the receiving water body and the presence of farm animals; and
- May cause significant adverse effects on aquatic life such as mortality due to acute ammonia toxicity.

We have reviewed and agree with these comments. With regard to S107(2) as the discharges are not exceptional, associated with maintenance works or temporary

(given there is no restriction proposed to their frequency or duration), a discharge permit cannot be granted for this activity. This is a key issue for this application that the Hearing Panel must carefully consider.

9.4 Part 2 of the Act

The application is subject to Part 2, the purpose and principles, which are set out in Sections 5 to 8 of the Act. Those matters that should be considered for these applications are addressed below.

The purpose of the Act is achieved by allowing activities that benefit people. Clearly, reticulated wastewater systems fundamentally support social, economic, and cultural well-being, and health and safety. Allowing uncontrolled discharges of untreated wastewater from such systems, however, will not provide for those matters. The proposed discharge is unknown and potentially significant. Granting a term of 35 years is the equivalent of a full generation. Consequently, we consider that granting the discharge permit as applied for does not sustain *the potential of natural and physical resources, (excluding minerals) to meet the reasonably foreseeable needs of future generations.*

As discussed in Section 8.1 of this report, effects on water quality are more than minor and potentially significant. We consider that granting the discharge permit as applied for does not *safeguard the life-supporting capacity of air, water, soil and ecosystems.*

The applicant has not sought to avoid adverse effects and as discussed in Section 8 of this report, we do not consider that they have adequately remedied and/or mitigated adverse effects. Consequently, the proposal is inconsistent with Section 5 of the Act.

Section 6 of the Act requires that in assessing the applications, that matters of national importance are recognised and provided for:

- a) *The preservation of the natural character of the coastal marine area, wetlands, and lakes and rivers and from inappropriate subdivision, use, and development:*
- b) *The protection of outstanding natural features and use, and development:*
- c) *The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:*
- d) *The maintenance and enhancement of public access lakes, and rivers:*
- e) *The relationship of Maori and their culture and traditions sites, waahi tapu, and other taonga.*
- f) *The protection of historic heritage from inappropriate subdivision, use and development.*
- g) *The protection of recognised customary activities.*
- h) *The management of significant risks from natural hazards.*

Sections 6(a), 6(b), 6(c), and 6(e) are particularly relevant to this application.

Schedule 1A of the RPW identifies the upper Clutha River/Mata-Au catchment as containing many outstanding natural features. The catchment also contains many values of national importance including lakes that are protected by a Conservation Order and a Preservation Act. Furthermore many of these waterbodies can also be considered iconic of New Zealand.

This catchment contains significant habitats of indigenous fauna and cultural values, which have been illustrated through the submissions received from DOC and mana whenua.

Though these matters have been recognised, as outlined in Section 8 of this report, we consider that the discharge of unrestricted volumes of waste water, containing floatable sanitary products, throughout the district does not provide for these matters of national importance.

Section 7 of the Act sets out those matters to which particular regard must be had in achieving the purpose of the Act. Matters relevant to the proposal under consideration are as follows:

(a) *kaitiakitanga*:

(aa) *the ethic of stewardship*:

In respect of *kaitiakitanga*, the various Papatipu Runaka were provided with the opportunity to exercise guardianship in regard to the natural and physical resources in the area. Papatipu Runaka exercised their *kaitiakitanga* and opposed the proposed discharge of untreated wastewater to the environment.

(b) *the efficient use and development of natural and physical resources*:

The discharge of unrestricted volumes of untreated wastewater to the various waterbodies of the Queenstown Lakes District is not considered to be an efficient use and development of these high value waterways.

(c) *the maintenance and enhancement of amenity values*:

The discharge of unrestricted volumes of untreated wastewater to the various waterbodies of the Queenstown Lakes District does not maintain or enhance the amenity values of the district.

(d) *intrinsic values of ecosystems*:

The discharge of unrestricted volumes of untreated wastewater to the various waterways and lakes of the Queenstown Lakes District does not support the ecosystems identified in Schedule 1A of the RPW.

(f) *maintenance and enhancement of the quality of the environment*:

The discharge of unrestricted volumes of untreated wastewater to the various waterbodies does not maintain or enhance the quality of the iconic Queenstown Lakes District.

(g) *any finite characteristics of natural and physical resources*:

On the information provided with the application, it is unclear whether the discharge of unrestricted volumes of untreated wastewater for the requested 35 years could permanently affect the natural and physical resources of the receiving environment.

(h) *the protection of the habitat of trout and salmon*:

As identified in Section 2 of this report, trout and salmon inhabit many of the receiving water bodies. As discussed in section 8.1.1 of this report, effects on aquatic ecology are more than minor and potentially significant. This is supported by Otago Fish and Game's opposition to the whole application, and requests that the consent not be granted in its current form.

Section 8 requires all persons acting under the Act to take into account the principles of the Treaty of Waitangi / Te Tiriti o Waitangi. The key principles are commonly referred to as 'partnership, participation and protection'. Participation has been provided for through the consultation with mana whenua prior to applying, and through the public notification of the application. Partnership has not been provided for given the applicant has applied for an activity that is culturally offensive to mana whenua (based on the submission received). We do not consider that protection has been

provided for, particularly due to the culturally offensive nature of the discharge over a long duration. This view is supported through the submissions in opposition from both TRONT and Papatipu Runaka. Consequently, the proposal does not take into account the principles of the Treaty of Waitangi / Te Tiriti o Waitangi.

Overall, this application is inconsistent with Part 2 of the Act.

9.5 Proposed consent conditions

No conditions have been proposed as part of this report. However, comments have been provided on the conditions proposed by the applicant on the 25th of September. These comments are included in Appendix 3 of this report.

General comment on conditions

In an Environment Court decision for *Skyline Enterprises Limited v Queenstown Lakes District Council*¹⁸ it was determined that use of the word 'must' is preferred to 'shall' when outlining mandatory obligations of consent conditions. This is on the basis that 'shall' is ambiguous in that it can be directive rather than mandatory. If the Hearing Panel is of the opinion to grant the consent subject to the applicants proposed condition, it is recommended that all references to 'shall' are replaced with 'must'. 'QLDC' should be replaced with 'Consent Holder' and 'Otago Regional Council' should be replaced with 'Consent Authority'.

The applicant has identified that network improvements are planned to reduce the likelihood of overflow events as outlined in Appendix 2 of this report. These planned improvements are referenced throughout the AEE as means of mitigating the effects. For this to be considered as a mitigation measure, it must be illustrated through conditions of consent. However, the conditions as outlined in Appendix 3 provide no requirements for such improvements and therefore no obligation to make the upgrades.

Proposed Condition 10 requires an annual report where an update must be provided on any upgrades that have occurred or are to occur, however there is no associated obligation to make these upgrades. The conditions as proposed could provide no reduction in overflow events throughout the 35-year consent term and could indeed result in the frequency increasing. If the Hearing Panel were of the opinion to grant the consent, it is recommended that conditions are included to require progressive upgrades and require benchmarking for reducing overflows throughout the term of the consent.

Overall, we consider that the conditions of consent do not adequately manage the effects of the activity. Furthermore, due to unknown and potentially significant nature of the discharge, we cannot recommend a suite of conditions to manage such effects.

9.6 Term of Consent

The applicant has sought a duration of 35 years. This is the longest term that may be granted in accordance with Section 123 of the Act.

A duration of 35 years has been sought to provide long-term certainty for the applicant and to account for the ongoing nature of the discharge. This aligns with the applicant's 30 Year Infrastructure Strategy and Long Term Plan. They have considered that adverse effects are known and will be adequately managed through conditions of consent.

¹⁸ *Skyline Enterprises Limited v Queenstown Lakes District Council* [2018] EnvC 242

We do not consider that the applicant has justified the term of consent it seeks. Through the applicant's Assessment of Environmental Effects, the main form of mitigation was provided in the reduction of overflows through planned infrastructure upgrades. This is planned through the applicant's Long Term Plan (10 years). Notwithstanding the fact that the proposed conditions do not require these improvements, the proposed duration is inconsistent with this.

In relation to our consideration of the appropriateness of the term proposed for the discharge, we refer to case law that has distilled the following factors that will be relevant to the Council's determination of the duration of a resource consent:

- The duration of a resource consent should be decided in a manner which meets the Act's purpose of sustainable management;
- Whether adverse effects would be likely to increase or vary during the term of the consent;
- Whether there is an expectation that new information regarding mitigation would become available during the term of the consent;
- Whether the impact of the duration could hinder implementation of an integrated management plan (including a new plan);
- That conditions may be imposed requiring adoption of the best practicable option, requiring supply of information relating to the exercise of the consent, and requiring observance of minimum standards of quality in the receiving environment;
- Whether review conditions are able to control adverse effects;
- Whether the relevant plan addresses the question of the duration of a consent;
- The life expectancy of the asset for which consents are sought;
- Whether there was significant capital investment in the activity/asset; and
- Whether a particular period of duration would better achieve administrative efficiency.

A duration of 35 years is contrary to many of these factors. Granting a long-term duration to an activity that results in unknown and potentially significant adverse effects is contrary to the purpose of the Act. The effects may fluctuate throughout the term and conditions do not adequately manage such effects. Although a review clause is proposed, this allows only specific scope for the Consent Authority in reviewing the consent and must not be used to manage uncertain effects¹⁹. Although the applicant has provided evidence of capital investment through planned improvements, this does not justify granting the consent for such a long duration as no specific details have been provided. Policy 7.C.4 of the Regional Plan: Water for Otago provides direction on when to grant a long-term duration. As discussed in Section 6.1.4 of this report, granting a 35-year duration is inconsistent with this policy.

Overall, we consider that granting a term of 35 years based on the unknown and potentially significant nature of the activity could result in long term significant adverse effects.

10. Recommendation

The applicant is applying to discharge municipal wastewater from within its district. As uncertainty exists regarding the location, duration and concentration of the discharge the effects of the activity cannot be meaningfully quantified. Based on the risk assessments provided by the applicant it is likely that they would be more than minor.

¹⁹ *Prime Range Meats Ltd v Southland Regional Council* [1998] EnvC C127

We believe that the key issues with the application are:

- The incompleteness or unavailability of the information required to assess the likely adverse environmental effects of discharges proposed to be enabled by the consent, and the adequacy of potential measures to address such adverse effects.
- A lack of information to adequately assess the consistency of the proposed activity with relevant statutory instruments.
- A lack of information to adequately assess the matters specified by section 105.
- A lack of information to adequately enable an assessment against section 107, without which consent cannot be granted.
- The potential for adverse effects (including on cultural values) that are significant. As only a risk assessment has been provided, there is a high degree of uncertainty over the potential effects on the environment.

The application has been overwhelmingly opposed by the community, and statutory and non-statutory organisations as well as Papatipu Runaka and Ngāi Tahu. Options have been suggested by submitters that alternatives such as waste contaminant measures should be considered by the applicant, to avoid the discharge.

The RPW and RPS encourages adaptive management and innovation to reduce the level of contaminants in discharges. The applicant is not seeking to implement any adaptive management or innovation processes, simply to continue discharging unquantified volumes of untreated wastewater to land in a manner that will enter high value waterbodies.

The applicant has proposed to upgrade their systems and to provide annual monitoring reports, as well as implement an education programme and a response plan. These measures do not require a resource consent before they can be implemented. Given discharges from the system have been occurring sporadically for many years, it would not seem unreasonable to have expected these measures to have already been implemented. Granting a generic consent as applied for may not have the effect of incentivising upgrades in accordance with best practice.

The proposed discharge of wastewater that may include tampons, sanitary towels, toilet paper, wipes and nappies etc is inconsistent with all relevant planning documents at all levels including S107 of the Act, community expectations as outlined in the submissions and cultural values. It is recommended that the Hearing Panel decline Discharge Permit application RM19.051.01. The reasons for this are:

1. The activity is inconsistent with the relevant statutory requirements including Part 2 of the Act;
2. The activity is contrary to Section 107 of the Act; and
3. The effects are more than minor and potentially significant

If the Hearing Panel is of the mind to grant the consent, it is recommended that the changes suggested to the proposed consent conditions are made and adopted. It is also recommended that consideration is given to a short duration consent to provide for the interim management of the system so necessary improvements can be made.



Peter Christophers
Principal Consents Officer



Charles Horrell
Senior Consents Officer