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Submission on Application No. RM19.051

This feedback is provided on behalf of the Otago Fish and Game Council (**Fish and Game**). For additional information please contact Nigel Paragreen using the details below.

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N. Paragreen ..... 12 July 2019 .....

General

[1] Fish and Game is the statutory manager of sports fish and game bird resources within Otago. It holds functions and responsibilities set out in the Conservation Act (1987). Part of the organisation's function is to represent the interests and aspirations of anglers and hunters in the statutory planning process and to advocate the interests of the Council, including its interests in habitats. This submission is provided in accordance with this function.

[2] As required by the Conservation Act (1987), Fish and Game has prepared a sports Fish and Game Bird Management Plan for Otago[1] (**SFGMP**), which has guided the development of this submission. This document describes the sports fish and game bird resources in the region and outlines issues, objectives and policies for management over the period. The document may be useful for decision makers to have regard to when considering this application.

[3] Fish and Game submits in respect to the whole application, which it opposes and requests that the consent not be granted in for form specified in the application. Fish and Game could be supportive of the consent provided conditions were imposed which:

[1] Otago Fish and Game Council, *Sports fish and game bird management plan for Otago 2015-2025.* Dunedin, 2015. A copy has been attached to this submission.

a. created performance standards equivalent to the current pattern of discharge and improved incrementally over time; and

b. shortened the duration of the consent.

[4] Fish and Game does wish to be heard in support of its submission.

The activity in the context of the Queenstown Lakes District

[5] Fish and Game considers that the activity described in the application has serious potential for environmental harm via adverse effects on freshwater ecosystems and the people who use them. To summarise the application, a description of key characteristics of the activity sought might be:

a. a discharge of wastewater to water, or to land in circumstances where it may enter water;

b. a wide current geographic extent covering the major urban centres in the district, with the future inclusion of additional urban centres; and

c. an unspecified scale of discharge, in terms of the volume discharged, the duration of discharge and the number of discharges that may occur in a given period;

d. a duration of 35 years.

[6] Fish and Game staff, and many professionals in Otago, often refer to consents which have a wide geographic scale and long duration as global consents. District councils seem to be more likely to apply for or hold historic global consents due to the nature of their work, in which homogenous tasks requiring resource consent may need to be undertaken frequently. Fish and Game's experience with global consents is that they can be misused and abused if they are overly permissive as the managers, direction and culture of institutions change over the long time frame of the consent. As a result, it is important to Fish and Game that global consents have strict consent conditions which are not open to interpretation.

[7] The receiving waters of the Queenstown Lakes District (**the District**) that may be affected by the global consent covers an immense variety of waterbodies, ecosystems and human uses. This is problematic, as the scale of the activity described in the application is also immense. Because it would be nearly impossible to independently assess each stream, the AEE Ryder Environmental Ltd. (**Ryder**) has categorised and described the affected waterbodies into very large rivers; medium – large rivers; small – medium rivers; streams; large lakes; and medium lakes[2]. This is an understandable action to take, albeit one which will undoubtedly cause detail to be lost. Nonetheless, the broad description does enable a discussion about the impacts on ecosystems.

[8] Fish and Game holds additional information on some of the rivers within the geographic scope of the application. A classification system to assign grades of significance to habitat across Otago[3] and surveys of angler effort, measured in angler days have been carried out[4]. These figures help Fish and Game staff to identify the importance of a fishery to licence holders.

[2] Appendix C of the application

[3] Fish and Game. *SFGMP.* Dunedin, 2015, p 76-90.

[4] M J Unwin, *Angler usage of New Zealand lake and River fisheries: results from the 2014/2015 National Angling Survey.* The National Institute of Water & Atmospheric Research Ltd, Christchurch, 2016.

[9] Streams named in the application for which there is good information are shown below.

Application category	River Name	Significance	National Angler Survey Result (angler days)			
			2014/2015	2015/2016	2016/2017	2017/2018
Very large rivers	upper Clutha / Mata-Au	National	6,670 ± 1,330	20,900 ± 3,220	20,160 ± 2,760	11,440 ± 2,130
	Kawarau	-	1,630 ± 600	1,930 ± 750	1,700 ± 770	3,500 ± 1,000
Medium-large rivers	Hawea	Regional	480 ± 170	710 ± 310	4,970 ± 1,310	1,920 ± 470
	Shotover	-	150 ± 80	70 ± 50	1,120 ± 500	130 ± 60
Small-medium rivers	Arrow	Local	160 ± 100	350 ± 160	-	210 ± 120
	Cardrona	-	200 ± 180	30 ± 30	-	30 ± 30
Large lakes	Lake Hawea	National	13,640 ± 2,490	21,920 ± 2,750	28,160 ± 3,670	18,820 ± 2,260
	Lake Wakatipu	National	21,860 ± 3,170	20,970 ± 2,230	17,720 ± 1,910	21,410 ± 2,180
	Lake Wanaka	National	22,410 ± 3,180	39,070 ± 5,710	25,270 ± 2,310	25,530 ± 2,370
Medium lakes	Lake Hayes	Regional	180 ± 90	500 ± 160	1,540 ± 830	1,430 ± 480
Total angler days in Otago			*180,860 ± 8,330*	*215,430 ± 9,370*	*218,710 ± 8,660*	*182,870 ± 6,470*
Total, as a percent of total angler days in Otago			*37.26%*	*49.41%*	*46.02%*	*46.16%*

[10] There are a number of small rivers and streams which Fish and Game does not hold this type of information on but are incredibly important to licence holders nonetheless. Luggate, Mill, Bullock and Horne Creeks are named in the application and each of these streams supports spawning critical to local fisheries in the Upper Clutha, Lakes Hayes, Lake Wakatipu and Lake Wanaka. Three of these four fisheries are listed as having national significance, with significant angler effort.

[11] It should also be noted that there will be many small streams which are not identified by the application yet may be impacted by the proposed discharge. These may provide low density spawning services; habitat for juvenile or adult fish; or production for invertebrates that float downstream and will be preyed upon. Ecological production is cumulative and works best when there are a wide range of interconnected, healthy habitats. As a result, we should be concerned not only by the ecosystems which have huge measurable productive capacity but also whose which support them to a lesser extent.

[12] To put it simply, the receiving waters for this application are extremely valuable. Ranging from large lakes and rivers with exceptional angling waters for anglers in Otago to critically significant spawning streams to small streams with typical small stream values. To discharge wastewater into any of them is a meaningful event that should not be taken lightly.

The existing and future environment

[13] The Queenstown Lakes District Council (**QLDC**) has inferred numerous times in statutory and non-statutory assessment[5] that the activity is existing, and that this should bear some weight in policy interpretation. Fish and Game submits that his is not the case. The activity has clearly occurred in the past; however, it has done so illegally. Previous discharges were likely a breach of s15 of the Resource Management Act (**RMA**) and would not have been permitted by a National Environmental Standard, other regulation, a resource consent or a rule in the Regional Plan Water (**RPW**). As such, they should not be considered part of the existing environment from a planning perspective.

[14] Looking to the future, the intense development pressure on the district should also be considered. The district has experienced phenomenal growth in the past and is expected to continue growing over the life of this consent, as shown below[6].

Variable	2018	2028	2038	2048
District				
Residents	39,500	56,400	65,900	74,400
Total Houses	20,840	28,500	33,290	37,770
Total Visitors (Average Day)	24,860	31,490	35,550	39,040
Total Visitors (Peak Day)	79,300	99,750	113,810	126,370
Average day population*	64,360	87,890	101,450	113,440
Total Rating Units	26,020	35,300	39,830	45,280

[15] While the information from this source is intended for general use only, the trend is very clear. The projected near doubling of the average day population, which equates to the residents plus total visitors (average day), will place significant additional pressure on the wastewater system. With it will likely come an increased risk of discharge events.

[16] However, the cumulative effects of additional people will likely be more than simply increased risk of discharges. People demand goods and services, housing, transport and jobs to pay for it all. This economic activity will place additional burdens on the district's ecosystems and natural resources, including the ability of its waterbodies to absorb contaminants without serious consequence.

[17] Much of the analysis in the AEE by Ryder relies upon the ability of pristine environments to absorb and/or dilute wastewater from discharges, therefore significantly reducing the adverse effects of a discharge event. Can we be confident this assumption will hold for the life of the 35 year duration of the consent?

Scale of the discharge

[18] Table 2 of the AEE outlines the potential level of effects, assessed by Ryder, of a discharge of wastewater to a freshwater ecosystem. This table demonstrates that the effects exist on a continuum, from low to high. This basis is then used in the context of each category of waterbody to assess the risks of adverse effects. A useful summary of results can be found in Table 7 of the AEE.

[5] Appendix F of the application

[6] Utility Ltd. *Queenstown Lakes District population projections (December 2018).* Queenstown Lakes District Council, 2018. Retrieved from: https://www.qlc.govt.nz/assets/Uploads/Our-Community/Population-Projections/QLDC-Growth-Projections-2018-to-2048-summary-table.pdf

[19] It is reasonable to assume that as the scale of the discharge, in terms of frequency and volume, increases, the situation would move up the scale outlined in Table 2. A one off, small discharge into a pristine environment may have a short term impact but it would be expected be absorbed quickly because the ecosystem would likely be resilient. However, more frequent and/or larger discharges will have larger effects and the level of effect will likely be larger.

[20] This is particularly the case with the frequency of discharge, as an ecosystem still recovering from the previous discharge now have additional contaminants to deal with and could be pushed over ecological thresholds. Both degradation from previous wastewater discharges and cumulative effects from other activities could act in this way. Examples of current cumulative effects might include high levels of siltation from inappropriate subdivision in Bullock Creek or prolonged low flows caused by abstraction in Luggate Creek. In future, such pressures on the district's ecosystems may be more common.

[21] The underlying assumption in the AEE is that the discharges will continue as they are currently – short term and very occasionally[7]. However, there is nothing in the volunteered consent conditions which ensures this will be the case. If a consent is issued as applied for, it would permit an unlimited number of discharges, each of an unlimited volume and duration.

[22] This means the potential future discharge regime would permit discharges that are greater than is currently experienced. In this situation, the AEE is unhelpful except to say that the risks will be higher than stated. To what degree is unknown. When this is the case it is impossible to assess the actual and potential effects of allowing the activity, as required in s104 of the RMA.

[23] What is clear from Table 7 that the risk of the current discharge regime is already moderate to high for many waterbodies, particularly streams. As discussed previously, this category includes spawning streams and provide for nationally significant fisheries. Additional risk for these streams may have significant effects.

Policy Assessment, performance standards and responsibility for discharges

[24] Given the above, it is difficult to assess the full effects of the proposed activity in the context of the relevant policy documents. Because there is no limit for the volume, duration of frequency of discharges the QLDC would legally be able to discharge at a scale of the recent Taupō accident[8] every other week. It would be absurd to imagine that such an effect would be consistent with the relevant provisions of Iwi management plans, the SFGMP, the RPW, the Regional Policy Statement or the National Policy Statement for Freshwater Management; let alone be consistent with the Kawarau Water Conservation Order, the Lake Wanaka Preservation Act or Part 2 of the RMA.

[25] Fish and Game raised this issue multiple times during consultation with the QLDC. It has also raised a solution in the form of volunteered conditions outlining performance standards for wastewater discharges, which the QLDC would be obliged to stay within. For example, a limit on the average number of discharges to water, average volume of discharge to water and average duration of discharges to water over a rolling time period.

[26] So far, the QLDC has not be willing to take this on as a solution. In response, it has claimed that it should not be held responsible to specific performance standards as it has no control over when and where the discharges occur. This question of responsibility is critical.

[7] For example, in the 1st paragraph of section 6.2.1 of the AEE

[8] https://www.rnz.co.nz/news/national/393516/taupo-cleanup-begins-after-190-000-litre-sewage-spill

[27] It is true that it is the general population of the district, not specifically QLDC staff, that are causing the network blockages. However, the QLDC is a democratically run institution who represents and is funded by the general population of the district. Collectively, they are responsible for the discharges and Fish and Game submits that it is not unreasonable for them to be collectively held responsible for ensuring those discharges do not cause undue harm.

[28] Discharges can be controlled loosely through investment in improving and maintaining network infrastructure and education for the populace. For this, the QLDC has volunteered related consent conditions in the application. Fish and Game is pleased that the QLDC plans to undertake work in these areas.

[29] Unfortunately, there is nothing in the volunteered consent conditions that binds the QLDC to levels of investment of education which can be expected to achieve results. In subsequent long-term planning rounds, the QLDC of the day could simply change their plans and use the money earmarked for infrastructure investment on another cause. In that case, the scale of mitigation claimed by the application would be diminished. Similarly, the volunteered education consent condition could be satisfied by a leaflet in a waiting room just as effectively as a million-dollar advertising campaign. Just as there's no way of assessing the adverse effects of the proposed activity, there is no way of assessing how investment and education conditions may mitigate those unknown adverse effects.

[30] If performance standards were considered, both issues could be resolved. An assessment of effects against the policy framework could be undertaken as the (average) scale of effects would be known. If they were pegged to a discharge pattern similar to or less than what is experienced currently, the AEE information will be useful. Similarly, the scale of conditions to mitigate the adverse effects would be less important to decision makers, as the QLDC would have incentive to do what is required to stay within their performance standard conditions. In this instance, reporting conditions like those volunteered would be adequate.

[31] In addition, a performance standard condition could be used to ensure the QLDC improved over time. This could take the form of a staged, periodic decrease in identified limits over the life of the consent. Fish and Game would strongly support such an outcome.

[32] Without performance standards, or some similar solution, Fish and Game considers that the application is unacceptably permissive and has a high risk of abuse by future iterations of the QLDC.

Consent Term

[33] Fish and Game's position is that the consent should not be granted without performance standards. However, if they were to be adopted in a sensible manner, then consent term must be considered. Given the fast pace of development in the region, it would be unreasonable for a consent of this nature to be issued for 35 years. As a result, Fish and Game has a preference for a consent duration that is shorter than 35 years.

Conclusion

[34] In summary, Fish and Game opposes this application. Accidents will happen and seems that the QLDC genuinely wants to resolve this issue. However, good intentions cannot be relied upon and should not be a substitute for clear and enforceable consent conditions. This is the only way that decision makers, stakeholders and the public will have certainty that anticipated results will be achieved.

[35] In its current state, the application is not consistent with relevant policy documents and legislation as it would enable an unlimited frequency, duration and volume of wastewater discharges to occur into ecosystems of incredible value. In assuming the discharge pattern will remain the same as historic discharges, despite the permissive nature of the volunteered conditions, the AEE is fundamentally flawed in its analysis and is ultimately unhelpful in a policy assessment. It is unclear what the effect of education and investment mitigation conditions proposed will be and whether they will be successful in avoiding future discharges.

[36] Performance standards as conditions of consent may be a way to resolve these issues. If this were the case, the consent term would need to be considered. Fish and Game feels it is appropriate that the consent term be less than 35 years.