

BEFORE THE HEARING PANEL

IN THE MATTER

the Resource
Management Act 1991
(the Act)

AND

IN THE MATTER

of application by Tararua District Council to
Horizons Regional Council for application
APP-1993001253.02 for resource consents
associated with the operation of the
Pahiatua Wastewater Treatment Plant,
including earthworks, a discharge to Town
Creek (initially) then to the Mangatainoka
River, a discharge to air (principally odour),
and discharges to land via seepage, Julia
Street, Pahiatua

Submission by Wellington Fish and Game Council

Phil Teal

Regional Manager

24 May 2017

My name is Phillip (Phil) Teal. I am the Regional Manager of Wellington Fish and Game Council, a position I have held for over nine years, and prior to that over seventeen years with Auckland/Waikato Fish and Game Council. I have relevant qualifications in ecological assessment and technical issues (Masters of Science (Hons) in Biological Sciences). I have experience in Resource Management Act processes and hearings since its inception.

Wellington Fish and Game Council is a statutory body established under the Conservation Act 1987. Under Section 26 of the Conservation Act 1987, Fish and Game Councils have a statutory obligations to: maintain, manage, and enhance the fish and game resource in the recreational interests of anglers and hunters; assess and monitor the condition and trend of ecosystems as habitats for sports fish; advocate the interests of the Council, including its interests in habitats; and represent the interests and aspirations of anglers and hunters in the statutory planning process.

Part 2 considerations of the Resource Management Act 1991 relevant to Fish and Game Council's submission are: section 6 (a) that obligates the committee to recognise and provide for as a matter of national importance the preservation of the natural character of rivers and their margins; and section 7 (h) that details matters for regard specifically relating to the protection of the habitat of trout. This includes ensuring that the physical, chemical, and ecological aspects of that habitat are such that the trout fishery can be sustained, and the life supporting capacity of the resource is protected.

The discharge of nutrients would continue to adversely impact on the life supporting capacity of the resource (relative to baseline levels), its natural character, its recreational values, and its sustainable management. As such, the current application contravenes the purpose and principles of the Resource Management Act 1991. Also under the Local Government Act 2002 the Tararua District Council needs to take account, not only the social and economic wellbeing of the community, but also its environmental wellbeing – the latter is not being appropriately addressed.

This submission will focus on advocacy for improved water quality and habitat values for trout habitat and ecosystem health.

The Mangatainoka River has significant values as a fish and game resource; namely:

- Identified as trout spawning habitat;
- Identified as a fishery of regional importance (One Plan – Schedule D).

This also applies for the downstream sites on the Manawatu River.

Wellington Fish and Game Council therefore considers that the following principles should be considered and supported:

1. Reducing nutrient inputs (namely nitrogen and phosphorus) into the receiving environment – the Mangatainoka River and downstream Manawatu River – to achieve the One Plan target for MCI (Macroinvertebrate Index) of 120;
2. To maintain ecosystem health whereby a healthy ecosystem is where the life supporting capacity, ecosystem processes and indigenous species including their associated ecosystems, of freshwater;
3. This supports a healthy trout fishery through trout food and trout habitat;
4. Point source discharges from wastewater treatment plants be discharged to land (if practical and possible);
5. A proactive approach to improving water discharge quality to create a trajectory of improving water quality of the Manawatu River and its tributaries to achieve ecosystem health;
6. Improved consideration of the cumulative effects of additions of nutrient inputs – need to get beyond the discussion of individual effects being “no more than minor” even though additional inputs can be interpreted as relatively small when considered in isolation;

7. From Mr Canning's analysis and evidence he recommends to achieve the One Plan MCI target of 120, average SIN should be between 0.02-0.1mg/L and DRP between 0.0039-0.008mg/L.
8. Mr Canning noted that if the One Plan MCI target is to be achieved then the whole catchment loads will need to be reduced, a part of which is the WWTP.
9. Mr Canning further calculated the contribution of the WWTP to the required river nutrient concentrations of ~0.1mg/L for SIN and DRP ~0.006mg/L:
 - i. *“ Mean annual flow, the WWTP will contribute to 2.7% of the required 0.1mg/L SIN concentration and 11% of the required 0.006mg/L DRP concentration.*
 - ii. *Summer low flow, the WWTP will contribute to 3.5% of the required 0.1mg/L SIN concentration and 26% of the required 0.006mg/L DRP concentration.*
 - iii. *Mean annual low flow (MALF, extreme summer flow), the WWTP will contribute to 10.7% of the required 0.1mg/L SIN concentration and 73% of the required 0.006mg/L DRP concentration.”*
10. Mr Canning concluded that at all flows, the Pahiatua WWTP will have a very small contribution (except at MALF when contribution is moderate) to the SIN concentration required to achieve the MCI target of 120. The WWTP will have a moderate contribution to DRP concentration at mean annual flow, and large contributions at low flow considering the in-river DRP concentrations required to achieve the MCI target of 120.
11. Mr Canning recommended that to have the most significant reduction in impact on ecological health that measures be used to substantially **reduce DRP load** from the WWTP be applied **during Summer low flow** periods.

Relief Sought:

Wellington Fish and Game Council considers that following should be considered for conditions of any consents for the discharge of treated waste water from the Pahiatua Wastewater Treatment Plant:

1. Address levels of nutrients discharged into the river that may result in excessive periphyton and algal growths – to achieve an MCI target of 120 then Chlorophyll a should be kept below 50mg/m² and to achieve that, in-stream nutrient concentrations will need to reduce to ~0.1mg/L for SIN and DRP ~0.006mg/L, (see paragraph 8 (g) of Adam Canning's evidence).
2. That the treated wastewater be discharged to land to:
 - **Further reduce phosphorus input into the receiving waters and specifically reducing DRP loads during summer low flow period;**
 - Reduce periphyton growth in the river resulting in less dissolved oxygen fluctuation and improved habitat for invertebrates and fish (trout habitat and trout spawning habitat),
 - Reduce periphyton growth in the river resulting in amenity values being maintained – i.e. the riverbed is not covered in algae,
 - That contact recreation for recreation including angler contact is safe and does not result in health issues.
3. Require adequate monitoring to enable levels of periphyton and algal growth to be assessed in a timely manner – establish a formal monitoring plan.
4. Require adequate monitoring of potential indicator species for abundance and diversity including macroinvertebrates and potentially trout – establish a formal monitoring plan.
5. Require action(s) in an adaptive management plan in response to trigger points to high levels of nutrient concentrations at discharge point and downstream, and periphyton levels downstream – establish a management plan responsive to changes in river biota.

6. Require a regular report (three or six monthly) on the discharge wastewater quality and indication of occurrences of non-compliance frequency within limits.
7. Require investigation of methods of treatment and discharge options (including discharge to land) to ensure continuous improvement and re-evaluation.
8. Require conditions imposed that are consistent with the principles of the National Policy Statement Freshwater and One Plan Regional Plan.

Additional Comments:

It would be preferable for the District Council to take a proactive approach to improving water discharge quality to create a trajectory of improving water quality of the Manawatu River and its tributaries to achieve ecosystem health.

[End]