



New Zealand King Salmon – Nov 2018-Oct 2019- Compliance Report for Coastal Permit (U040412) – Forsyth Marine Farm

Assessment of compliance with consent U040412

This report sets out the compliance status for the Forsyth Bay Marine Farm Coastal Permit – discharge to seawater. The information in this report is based on the Annual Environmental Monitoring at the Forsyth Bay, Waihinau Bay, Otanerau Bay and Ruakaka Bay Salmon Farms 2019 Report (Report No 3483) provided by Cawthron.

Compliance Status has been indicated using a monitoring traffic light system where **green** indicates compliance; **yellow** indicates technical non-compliance; **orange** indicates that a breach of effects or best practice consent conditions has occurred with minor actual or potential adverse environmental effects, and **red** indicates significant non-compliance where a persistent or significant breach has occurred causing adverse environmental effects.

Compliance Status: **Significantly non-compliant**

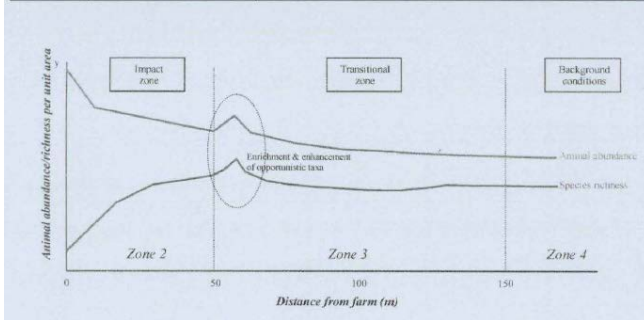
Report prepared by: Claire Frooms Environmental Protection Officer

Date: 2 July 2020

Please note that the following consent conditions are representative only, they do not include the complete list of conditions of consent.

Condition	Comment	Compliance Status
<p>14. ENVIRONMENTAL QUALITY STANDARDS</p> <p>The environmental quality standards (EQS) that shall be applied for seabed effects follow the model as presented in the application i.e. seabed effects are 'zoned' around the cages to allow for a mixing or transition zone. Outside this zone no adverse effect on the seabed is allowed. Three 'zones' under and around the marine farm shall be established as follows:</p> <p>a. Referred to as 'Zone 1' – Beneath the cages and out to 50 m from the cages.</p> <p>b. Referred to as 'Zone 2' - From 50 m to 150 m from the outside edge of the cages.</p> <p>c. Referred to as 'Zone 3' - Beyond 150 m from the outside edge of the cages.</p>	<p>The zones have been established as per the consent condition.</p> <p>The report details mild enrichment at the 50m station with moderately elevated sulphides and decreased redox potential – non-compliant.</p> <p>The overall ES at the 50m station was 2.6 ± 0.3, the report states this is within the assumed ES of ≤ 3.5.</p> <p>The overall ES at the 150m station was 2.3 ± 0.3 which again the report states is within the assumed ES of ≤ 2.5.</p> <p>Only indicators were showing possible enrichment effects at the 150m station – needs to be carefully monitored to ensure adverse effects are not developed.</p>	Compliant
<p>The EQS in each zone is as follows:</p>	<p>The report details that sediments below the pens (zone 1) is highly enriched with obvious patches of Beggiatoa-like bacteria. It also highlights very high to excessive seabed enrichment indicated by overall mean ES scores in zone 1 (Pen 1 ES 6.1 ± 0.6; Pen 2 ES 5.7 ± 0.4 and Pen 3 ES 5.6 ± 0.3). Sediments in two replicates at pen 1 were indicative of azoic conditions – significantly non-compliant.</p> <p>The annual report provides the</p>	Significantly non-compliant

Zone	Spatial Extent	Description and Bottom Line
1	Beneath the cages and out to 50 m from their outside edge	Sediments become highly impacted and contain low species diversity, dominated by opportunistic taxa (e.g. polychaetes, nematodes). It is expected that a gradient will exist within this zone, with higher impacts present directly beneath the cages.
2	From 50 m to 150 m from the outside edge of the cages	A transitional zone between zones 2 and 4. Within this zone, some enrichment and enhancement of opportunistic species may occur, however species diversity remains high with no displacement of functional groups. It is expected that a gradient will also exist within this zone.
3	Beyond 150 m from the outside edge of the cages	Normal conditions (i.e. background or control conditions).
All Zones	These conditions are not permitted beneath any NZKS farm	Sediments that are anoxic and azoic (i.e. no life present) will not be permitted.



macrofauna ES levels as 6.6; 6.1 and 5.8 for Pens 1; 2 and 3 respectively. These are all indicative of conditions which are non-compliant with the description provided in the consent condition for zone 1 – i.e. low species diversity, dominated by opportunistic taxa.

The report highlights how their previous recommendation that the farm remained fallowed was not adopted and the macrofaunal collapse observed on reintroduction of fish was to be expected. They reiterate that the seabed may not fully recover unless remedial work is undertaken.

The report outlines that conspicuous epifauna were largely absent in zone 2. Enrichment in zone 2 was mildly enriched but within the EQS in the context of the BMP guidelines.

21. ONGOING ANNUAL MONITORING

A monitoring report is to be prepared at least annually, and will include:

- a description of the types, location and area of structures within the 2 hectare authorised area and a description of any movement or relocation of structures over the previous year;
- presentation of monitoring results;
- a comprehensive and integrated report on the effects of the development and operation of the farm to date, including maximum biomass of fish and feed volumes discharged over that year;
- an assessment as to whether or not the farm is having a significant adverse effect on the environment or not;
- recommendations as to how any adverse effects on the environment can be avoided, remedied or mitigated; and
- the adequacy of the monitoring programme. NB: The monitoring programme shall be public record.

The annual monitoring report (report no. 3483) includes:

- a diagram of the pen locations within the consented area;
- a presentation of the monitoring results;
- a report of the effects of the farm operation, including feed volumes discharged in the monitoring period;
- an assessment of the adverse effects of the farm on the environment;
- recommendation that the level of feed input is reviewed and possibility of seabed remedial work is considered; and
- the report doesn't comment on the adequacy of the monitoring programme however a supplementary letter from Cawthron dated 24 April 2020 addresses this.

Please Note:

Monitoring Fees

Pursuant to section 36 of the Resource Management Act 1991 and the Marlborough District Council's (Council) schedule of fees, the consent holder shall be responsible for all costs associated with the monitoring of this consent in accordance with the schedule of fees.

Where non-compliance is noted on an inspection visit, remedial action is identified and advised to the consent holder in writing. A follow-up visit may confirm that appropriate remedial action has been taken. The consent holder shall receive an additional charge for the costs of the follow-up inspections undertaken by Council, or their agent, to ensure that compliance with consent conditions is met.

Privacy Statement and publication of information


Council needs to collect personal information (including names and contact details) to effectively monitor compliance with resource consents, plan requirements and the NES-PF. Personal information that you provide in response to this communication will be held and protected by Council in accordance with the Privacy Act 1993.

You can access and correct that information by contacting Council through the contact details below. The information that we receive from you will be made available to the public through Council's online resource consent files.



Marlborough District Council
15 Seymour Street, PO Box 443
Blenheim 7240
www.marlborough.govt.nz

Telephone 03 520 7400
Fax 03 520 7496
Email mdc@marlborough.govt.nz

A solid light blue horizontal bar spanning the width of the page.