

Consent Conditions as written

Summary Commentary

5.6 Dredging – Monitoring of Water Clarity and Quality

5.6.1 Dredging of the Whakatāne River channel during the months of December to February (inclusive) must not decrease water clarity (as measured by the black disk horizontal range) by more than 20%, below background levels, within 200 metres of the dredging position. The background water clarity level must be defined as being the water clarity 500 metres upstream of the dredging position.

Limit water **clarity** impact, as measured by black disk method, December to February

5.6.2 Dredging of the Whakatāne River channel between March to August (inclusive) must not result in a suspended solids concentration within the water column greater than 150 g/m³ above the background suspended solids level as measured 200 metres distant from the dredging position. The background suspended solids level must be defined as being the natural suspended solids level 500 metres upstream of the dredging position.

Limit water **quality** impact, as measured by suspended solids concentration, March to August

5.6.3 The consent holder must take visual water clarity measurements (using the black disk method) at a point 500 metres upstream of the dredging position and a point 200 metres downstream of the dredging position. The water clarity measurements must be undertaken daily on an outgoing tide, during dredging operations.

Water **clarity** monitoring requirement, only

5.6.4 All water clarity measurements required by condition 5.6.3 of this Coastal Permit must be carried out in accordance with the methodology described in “Colour and Clarity of Natural Waters; Science of Management of Optical Water Quality” by Davies-Colley et al (1993).

Methodology for water **clarity** monitoring, only.

5.6.5 The consent holder must:

- a. Supply the water clarity measurements required under Conditions 5.6.3 and 5.6.4 of this Coastal Permit to the Regional Council no later than two (2) working days after receiving the results; and
- b. Include the water clarity measurements in the Annual Performance Report prepared for the subsequent year of Boat Harbour operations after the dredging campaign as required by prepared Condition 1.5.8 of the Schedule of Common Conditions.

Reporting of water **clarity** monitoring, only, to BOPRC

The Problem

There are no controls on impact, nor requirement for monitoring and reporting for the month of November.

Water **clarity** monitoring will have no relevance in the months March to November, because the 5.6.1 limit on water clarity impact applies only to months December to February.

There is no requirement for water **quality** monitoring and reporting, at all, in the months March to November incl, to ensure compliance with 5.6.2. This is at odds with decision points:

point[335]The monitoring proposed either requires the water clarity and suspended sediment results to be relayed to BoPRC from 2 and up to 20 working days after each dredging campaign is completed (conditions 5.1.3 and 5.6.5)

and point [338] We agree that requiring daily monitoring during dredging is appropriate as is proposed.

The Remedy

As I pointed out in my submission on consent conditions dated 18 May 2022, on behalf of the Yacht Club, the suggested remedy is:

5.6.5

delete and replace with

“5.6.5 Once daily that dredging occurs in the main channel between March to November (inclusive), the consent holder shall (on an outgoing tide during dredging operations), take a water sample at a point 500 metres up stream of the dredging position and a point 200 metres downstream of the position. These samples shall be analysed as soon as practicable for suspended solids concentration.”

5.6.6

Add new

“5.6.6 The consent holder must:

- a. Supply the water clarity and quality measurements required under Conditions 5.6.3, 5.6.4, and 5.6.5 of this coastal permit to the Regional Council no later than two (2) working days after receiving the results; and**
- b. Include the water clarity and quality measurements in the Annual Performance Report prepared for the subsequent year of Boat Harbour operations after the dredging campaign.**

I also pointed out that dredging in river currents exceeding 1.0 knots will result in high bed material losses downriver during mechanical excavation

Consents in the WDC Harbour Development Zone eg.BOPRC 65217 are not dealing with currents as swift as those in the subject river channel.

As I pointed out in my submission on consent conditions dated 18 May 2022, on behalf of the Yacht Club, the suggested remedy is:

5.3 Dredging – Operating Times.

5.3.1 c. Dredging must not be undertaken when river currents exceed 1.0 knot at the dredging location.