

02 December 2020

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Bayview Nelson Limited  
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Resource Consent Number: RM205043 &  
RM205332

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Dear Mark

**RM205043 & RM205332: DECISION ON NON-NOTIFIED RESOURCE CONSENT**

Pursuant to Section 114 of the Resource Management Act 1991 ("the Act"), please find enclosed a copy of the Council's decision on your application for resource consent.

Section 357A of the Act provides you with the right to lodge an objection with the Council in respect of this decision and/or any associated conditions. Any such objection must be made in writing setting out the reasons for the objection and must be lodged with the Council, together with a fixed fee of \$320.00 (GST inclusive), within 15 working days of receiving this letter.

In addition Section 120 of the Act provides you with the right to lodge an appeal with the Environment Court in respect of this decision and/or any associated conditions. Section 121 of the Act requires that any such appeal must be made in the prescribed form, must state the reasons for the appeal, the relief sought, state any matters required by regulations and must be lodged with both the Environment Court and the Council within 15 working days of receiving this letter.

**You may commence your activity immediately unless you lodge an objection or appeal to this decision. However, it is important that you check the conditions of your consent carefully as some of them may require you to carry out specific actions before you may commence your activity. In some cases you may also require other permits or building consents for your activity and these must be obtained before you can commence your activity.**

Please note that under Section 125 of the Act, your consent will lapse in **five years** unless you have given effect to it before then. Once the final processing costs are determined an invoice will be sent out or you will be contacted if there is a refund of any fees.

Please feel free to contact me if you have any questions regarding any aspect of your consent or its conditions. My contact details are listed at the top of this letter.

Yours faithfully

  
Vince Matschke  
**Planner**

RM205043 &  
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Notice of Decision

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# RESOURCE CONSENT DECISION REPORT

## Resource Consent number: RM205043 & RM205332

Pursuant to section 104B of the Resource Management Act 1991 ("the Act"), the Nelson City Council ("the Council") hereby **grants** resource consent to:

Bayview Nelson Limited

### The activity to which this decision relates:

To discharge water from a sediment retention ponds that may contain contaminants from bulk earthworks associated with the Bayview Special Housing Area into the Coastal Marine Area (CMA) as well as temporary discharges of sediment or Poly Aluminium Chloride as a result of failures of erosion and sedimentation control measures to either the CMA or Oldham Creek.

### Location details:

Address of property:	Bay View Road, Nelson
Legal description:	Pt Sec 8 Suburban North District 1174, Lot 34 DP 441653, Lot 31 DP 487620, Lot 43 DP 9961
Certificate of title:	164567, 550238, 703598, NL5B/982
Location co-ordinates:	1626341.382E 5433826.93N (NZ Transverse Mercator)

### Site Description & Background

The application is located in the Atawhai (Bay View Road) and is subject to a subdivision of land and associated earthworks within a Special Housing Area (SHA) comprised of Lot 19 DP 3717 and Part Section 8 Suburban North District, Lot 31 DP 487620 and part of Lot 34 DP441653, as described in Schedule 1 of the Housing Accords and Special Housing Areas (Nelson) Order 2017. The outline of the SHA is pictured below.

The SHA is approximately 39 ha. in area and is located within the Landscape, Services, Fault Hazard, and Land Management Overlays of the Nelson Resource Management Plan 2004 (NRMP) Planning Maps.

A description of the SHA topography is adopted for this report from the application;

*This site is located in an elevated position above State Highway 6 and at the end of Bayview Road in Atawhai. As shown on the site contour drawings provided within Attachment C and also within various photos and graphics and supported by the technical report, this hillside has a variable topography. Tonkin and Taylor geotechnical assessment provided within Attachment G also summarises this topography:*

- The Site contains gently to moderately inclined slopes with west to north-east facing aspects and easterly to north-easterly aspects on either side of a gently northerly plunging ridge.*
- The bulk of the proposed subdivision is located on the broad Central Ridge, on secondary spurs falling from the central ridge such as the Dodson Spur, and also the western flank of the High Ridge.*



· Gully slope areas flanking the main ridgelines and secondary spurs generally contain hummocky ground indicative of previous slope mass movement including inactive and dormant earthflow deposits.

This application coincides with numerous others that have been already consented and should be read in conjunction with:

*SH195006 - Application for a Qualifying Development under the Housing Accords and Special Housing Areas Act 2013 (HASHAA) for the subdivision of Pt Sec 8 Suburban North District and Lot 34 DP 441653 into 163 residential allotments with additional utility and recreation reserves.*

*SH195013 – Processed under HASHAA for bulk earthworks to form building platforms, roads, reserves (including three stormwater detention ponds) with a maximum fill height up to 16m within the northern gully, and a maximum excavation on the main ridge of 12m in height for the associated subdivision of this consent.*

*RM195295 – Processed under the RMA to relocate previously uncontrolled fill and reinstate it onsite as controlled fill within one of the flanks adjacent the Ledger Road gully (Stage 1 of the earthworks to occur over the two year duration).*

*RM195297 - Processed under the RMA for an Above Ground Network Utility Building (Water Tanks, pump stations and connections) not connected to the Council's reticulated gravity stormwater network in the Services Overlay and Earthworks for the platform requiring 3.2m of unretained fill.*

*RM205067 -Processed under the RMA for a discharge of stormwater onto an adjoining property.)*

*RM205099 – Processed under the RMA for bulk earthworks to use within the Bayview SHA as fill.*

*RM205112 – Processed under the RMA for a discharge of stormwater onto an adjoining property.)*

*RM205113 – Procesed under the RMA for a land use consent for all potential dwellings/buildings within the Bayview SHA not able to connect to a Council's wastewater gravity outfall.*

*As well as any future earthworks site subject to the condition 2 of this consent.*

Each consent relates to an area of earthworks related to the creation of the 163 residential lot subdivision. Each consent is subject to specific conditions that either avoid or mitigate actual and potential adverse effects of erosion and sedimentation on the wider environment.

RM195295 formed the first stage of the comprehensive earthworks that begin to give effect to this subdivision. The earthworks under this consent are complete.

SH195013 are the bulk earthworks to form roads, building platforms, utility reserves and other land contouring of the subdivision masterplan. The first stage of the earthworks of this consent have largely been completed and are the closest point in proximity to the Coastal Marine Area.

The Consultant Planner Pete Keyanonda from Landmark Lile provided a thorough description of the earthworks areas and associated catchments in the application's assessment of effects (AEE). I have adopted them here for the purpose of this report.



## **Ledger Road Catchment**

*The earthworks proposed in the Ledger Road catchment has been granted by Council under RM195295.*

*The works involve:*

- A cut/fill volume of approximately 11,000m<sup>3</sup> +/- 2,000m<sup>3</sup>;*
- Installation of appropriate ESCP controls in accordance with the DESCPC;*
- Excavation of unsuitable stockpiles from areas identified;*
- Place material in two separate areas as controlled, uncertified fill;*
- Direct geotechnical supervision of the works;*
- Cut and fill batters to be stabilised under the design and supervision of a geotechnical engineer (no retaining walls proposed); and*
- Stormwater be captured and directed away from the site in a controlled fashion such that it does not cause slope instability and avoids downstream sedimentation effects.*

## **Bayview Road Catchment**

*The earthworks for the wider Bayview catchment and Special Housing Area development is currently being considered by Council under SH195006<sup>1</sup>.*

*These works involve:*

- approximately 370,000 m<sup>3</sup> of cut over six ridges and spurs and approximately 310,000 m<sup>3</sup> of engineered fill within three gullies, and additional surplus fill placed in designated on-site disposal areas.*
- It is intended that the bulk of earthworks will be carried out as a single operation carried out in stages, and that this will take approximately eighteen months to two years to complete.*
- It is not intended that the whole site is to be stripped of topsoil throughout that period. Rather, it is intended to progressively open up areas for earthworks, complete works, and stabilise completed earthworks in defined areas to allow a phased approach to the earthworks.*

## **Proposal**

The applicant is seeking consent for accidental temporary discharges of sediment laden stormwater and flocculant from a failed erosion or sediment control measures that form a part of any of the earthworks related to the Bayview Special Housing Area (SHA) that includes future earthworks consents within the same catchments as the Bayview SHA.

In addition, the applicant seeks consent to discharge sediment and flocculant to the Coastal Marine Area (CMA) from the site as a result of earthworks from the sediment control ponds. The site lies in close proximity to the Coastal Marine Area in which it is considered likely that sediment and Poly Aluminium Chloride (PAC or flocculant) will enter the CMA.

To clarify,

Under normal operating conditions that discharge from a sediment pond to land where it may enter a surface water body is permitted as long as there is no point source discharge of a contaminant into a water body under freshwater rule FWr.25.1(e).

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<sup>1</sup> SH195006 has now been issued along with SH195013.



In addition under FWr.25.1(g), discharges to the 'Council's stormwater infrastructure are permitted subject to compliance with the listed standards. The rule refers specifically and directly to Section 9.3 of the Land Development Manual 2010 (LDM) which is in the 'Earthworks' chapter and relates to 'Erosion and Sediment Control'. Discharges directly into Council's stormwater infrastructure, while complying with section 9.3, is a permitted activity.<sup>2</sup>

The proximity of the earthworks to the Coastal Marine Area on Ledger Road and the inability of the erosion and sediment control measures to effectively capture all sediment from the proposed earthworks will result in some sediment and flocculant entering the Coastal Marine Area under the normal conditions of the sediment pond discharge.

Therefore consent is sought under CMr.39 Discharges of contaminants.

In the event of storm and rain events in which the proposed erosion and sediment control measures fail or the rain event is larger than the design capacity of the sediment ponds, the applicant seeks consent for a temporary discharge of sediment laden water and flocculant into Oldham Creek and the Coastal Marine Area. Thus, the applicant seeks consent under FWr.25.1(d), the discharge of sediment laden water does not result in surface run off of any contaminant into a surface water body as well as CMr.39.1 above and CMr.44.1(a) Discharges of storm water.

The application has requested a 10 year duration on the discharge permits associated with the earthworks and landscaping implementation however, the applicant has requested that the duration be consistent with the SHA consent SH195006. This is accepted given the anticipated duration of the Bayview SHA will be nine years thus a duration will be placed that is consistent with this proposal.

## **REASONS FOR THE DECISION**

### **Assessment of Potential Adverse Environmental Effects (104(1)(a)) with regard to Sections 105 and 107 of the Act.**

#### **Temporary Discharges of Sediment Laden Stormwater and Flocculant into Oldham Creek and the Coastal Marine Area**

The Consultant Planner Mr. Keyanonda acting on behalf of the applicant in the applications Assessment of Environmental Effects (AEE) has assessed that *'During a large-scale event storm event, above the design levels of the ponds, and in a rare situation where the other sediment control methods are overwhelmed, the spill ways will be activated and some sediment may be discharged into the downstream receiving environment. This scenario would be considered an "un-mitigated and temporary discharge" as the sediment discharged may exceed the background levels of discharge from the catchment under natural conditions. This consent is also intended to capture all other unavoidable events beyond the applicant's control.'*

*The proposed sediment ponds will be appropriately sized in accordance with the requirements of the best practice principles as identified by the project engineers.*

*Nevertheless, the proposed activities have the potential to generate sediment and where this sediment is entrained in water and that water enters the waterway downstream of the works area then adverse effects can result. The activities which have the greatest potential to result in discharges of sediment to water include:*

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<sup>2</sup>Keyanonda, P, Landmark Lile, Nelson, Application for Resource Consent Discharge of sediment laden water to the Coastal Marine Area and Oldham Creek from storm events above the design level of the sediment control mechanisms and from events outside of the applicant's control, dated 24 February 2020.



- *Direct discharges to the CMA where such water is unable to be discharged to land.*
- *Initial diversion of water into the new clean water diversion channels.*
- *Rainfall events following the works which results in water flowing over areas which have yet to be revegetated.*
- *Vehicles crossing any flowing water during after high rainfall events.*

In my review I have considered not only within this consent application but that of SH195013 the adequacy of the erosion and sediment control measures that were proposed to be used onsite. The applicant in SH195013 used 'Erosion and sediment control guides for land disturbing activities in the Auckland Region' ('GD05') to assist in determining what the best practice methodology for designing their erosion and sediment control to be implemented onsite to ensure adverse effects on the wider environment from erosion and sedimentation will be less than minor. This application was granted 25 May 2020.

In summary, the sediment control ponds consented under SH195013 were designed to hold the volume of 3% of the contributing catchment. There was concern that the size of the ponds may not be taking into full consideration the local rainfall or topographical features of the Nelson area. It was recommended that consideration be given to the Nelson Tasman Erosion and Sedimentation Control Guidelines (NTESCG) 2019 as it uses a methodology for sediment pond sizing that based the design of the sedimentation control measures on the local soil types, topography, rainfall intensity for a design storm event based on its proximity to sensitive receiving environment and local rainfall statistics. However, in discussion with the applicant's Geo-professional Mr. Marcus Lovell, it was revealed that using the NTESCG, the storage volume of the sediment ponds had a volume value in between 2% and 3% of the contributing catchment. Thus, using a 3% sediment pond value was considered sufficient to meet the estimated duration for each stage of earthworks.

SH195013 and all associated consents as well as this application covered numerous monitoring and contingency measures detailed in the CEMP and Erosion and Sediment Control Plans (ESCP's) in large scale rain events which further demonstrated a commitment to undertaking numerous methodologies to mitigate the adverse effects of sediment on the wider environment. For further detail on these measures reference should be made to the consents listed above.

As all other earthworks were consented with similar conclusions based on the measures, I consider the adequacy of the erosion and sedimentation control measures detailed in all related earthworks consents provide justification to arrive at the same conclusion that the adverse effects from erosion and sedimentation will be mitigated as much as practicably possible.

### **Effects of the discharge of sediment on the wider environment**

The analysis of the site, its proximity to sensitive receiving environments and the efficiency of erosion and sedimentation control measures used onsite has highlighted that not all sediment and flocculant can be contained within the site which will inevitably lead to a discharge of contaminants to the Coastal Marine Area (CMA) under normal operating conditions from the sediment ponds near Ledger Road. This is due to very close proximity of these ponds and control measures to the CMA.

Mr. Lovell (the applicant's Geo-professional) has provided that even using the best practice erosion and sediment control measures, there will still be sediment and flocculant that is not captured from entering the receiving environment. A site net sediment yield (SNSY) was calculated by Mr. Lovell that estimated that over the 2 years



of earthworks proposed, that using a 97% sediment control efficiency<sup>3</sup> in his expert opinion would result in 128 tonnes of sediment (64 tonnes per annum) entering the Coastal Marine Area. It is worth noting that using a SNSY for all areas if left undisturbed would equate to 72 tonnes of sediment per annum.

An ecologist<sup>4</sup> acting on behalf of the applicant (Mr. Ben Robertson) considered the nature of the receiving environment in a further information response to Council that highlighted that the 'Nelson Haven is classified as a shallow intertidal dominated (SIDE; NZ ETI classification in Robertson et al. 2016a) type estuary with high ecological and human use values (Stevens and Robertson 2017). Despite having undergone significant historical reclamation and modification and consequent habitat loss (principally saltmarsh vegetation from its margins), the estuary still supports a variety of important intertidal/subtidal habitats (e.g. saltmarsh, seagrass/macroalgal beds, unvegetated mud/sand flats) and inhabitant biological communities (e.g. macroinvertebrates, fish and birds).'

*The overall ecological vulnerability of Nelson Haven has been assessed as 'moderate-high'*

*In 2019 the condition of the intertidal estuary was assessed at a broad scale by Stevens and Forrest (2019).*

*In the context of sedimentation impacts, the authors of the study concluded that:*

*•"...Mud extent was rated as poor<sup>1</sup> with the upper estuary dominated by firm and soft sandy-muds (336 ha, 38% of the intertidal area), often with a very high mud content (>90%). The 78 ha reduction in mud extent represents a decrease from 414 ha to 336 ha, and is consistent with anecdotal observations of a reduction along the eastern (landward) edge of the estuary. Despite this reduction, the spatial extent of mud remains [relatively] high in a regional and a national context..."*

*With the overall ecological condition of the estuary described as follows:*

*•"...Combined, the results indicate that the estuary currently has a relatively low overall risk from eutrophication, and despite extensive historical habitat modification, much reduced biodiversity, and large areas of mud, the estuary retains significant value. There has been some recent improvement in ecological condition through a reduction in mud-dominated substrat[a] and an increase in seagrass [areal extent]..."*

*Clearly the estuary includes high value ecological attributes (further discussed below), many of which are known to be vulnerable to sedimentation impacts and, as per Policy 22 of the New Zealand Coastal Policy Statement 2010, require consideration as part of consenting sediment/flocculant discharges to the estuary.'*

The ecologist used the estimates of sediment entering the CMA from Mr. Lovell on the impacts to the Zone of Influence (ZOI) in which sediment would discharge to.

*"Using the SNSY estimates above, and assuming 100% retention of the proposed load (unlikely), the ZOI areas may be subjected to the following theoretical maximum sedimentation rates over the proposed 2 year construction period:*

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<sup>3</sup> Sediment Control Efficiency (SCE) is a rational number that expresses how much sediment is removed by the respective control measure. Sediment ponds used in conjunction with flocculation have SCE of 75% to 95%. 97% is provided due to the use of a treatment train approach.

<sup>4</sup> Robertson Environmental, Bayview Nelson Ltd.



- 2.1 mm yr<sup>-1</sup> of sediment in ZOI 1 via Oldham Creek; and,
- 1.2 mm yr<sup>-1</sup> of sediment in ZOI 2 from discharges mainly via the Ledger Road catchment.

*If the bare areas within the catchments were left in their current undisturbed state, sedimentation rates are expected to be approximately 1.4 mm yr<sup>-1</sup> for ZOI 1 and 0.8 mm yr<sup>-1</sup> for ZOI 2, indicating the additional (short term) load from the proposed subdivision is comparable to background levels.*

*Any sediment exported to areas outside of the ZOI is expected to quickly become indistinguishable from background sedimentation given the much greater suspended sediment load (estimated to be in excess of 10,000 t yr<sup>-1</sup>) the estuary receives from adjacent catchment sources (i.e. Maitai River, Oldham Creek, Todd's Valley Stream, Hillwood Stream, and York Stream).*

*In conclusion the effects from fine sediment from Mr. Robertson 'In general, estuarine biota are more vulnerable to the effects of long term, concentrated increases in fine sediment than short term events.*

*In this case, the likelihood for adverse ecological affects associated with fine sediment discharges in the ZOI is considered to be very low. This is because sedimentation rates associated with the proposal are predicted to be low relative to background levels and, accounting for turbidity effects."*

Council's Water Quality Scientist Mr. Paul Fisher has noted that the sediment yields provided by the applicants Geo-professional were quite conservative at a 97% sediment control efficiency<sup>5</sup>. Although I consider Mr. Fisher has a point, the applicant is using a "treatment train" approach where he is considering the sum of all measures being used onsite to arrive at this value not just the sediment pond. I consider there is nothing that disproves this value is incorrect, and given the flocculation treatment to be used I have accepted it.

Mr. Fisher had also queried whether there would be any adverse effects to Inanga habitat in which the summary of the response from Mr. Robertson was '*On this basis, any sediment-related effects (cumulative or otherwise) on inanga spawning habitat at Oldham Creek from the proposed additional (short term) discharges, including during/after a significant rainfall event coincident with spring tides, are expected to be negligible. No additional mitigation or management plan is therefore suggested on ecological grounds.*'

Council's Water Quality Scientist, Mr. Paul Fisher in his review of the ecological assessment from Robertson Environmental stated "*The subdivision earthworks does have the potential to increase the proportion of fine sediment discharged in large storm events, which cannot be prevented through erosion sediment control design. This subdivision, with discharges to the catchment of Oldham stream could therefore contribute to potential direct and cumulative adverse effects on the Oldham Creek spawning habitat and the associated estuarine and coastal environment (sensitive receiving environment). The effects using the EIANZ (2018) criteria (moderate magnitude of effects and high ecological values), would rate the level of potential effects as more than minor.*"

<sup>5</sup> Sediment Control Efficiency values based on the amount of sediment that is not captured by the sedimentation control measure. The leftover 3% is what sediment enters the receiving environment as a potential. Thus, 75% to 97% can provide different values of the extent of sediment, however the duration should not have been two years but 6 month intervals.



In review of this assessment I note it would be impossible to exactly quantify the scale of an adverse effect without understanding the exact cause. For instance, a Q50 ARI rain event would generate more sediment than a Q25 ARI rain event. Similarly, the effects of a blocked drain may be significantly different than the effects of a discharge from the sediment pond spillway where there is further installations of sediment fencing to prevent fine sediment as a part of the treatment train contingency measures from entering the environment. The variables of the response would vary significantly.

It is only a probability that a large scale storm event will occur in the period that coincides with the earthworks. Each stage of earthworks is broken up into smaller sub-stages under SH195013 of a 6 month or less duration. The ESCP's control measures cater for at least a Q20 ARI rain event to occur within that time or a rain event that has less than a 2.5% chance of occurring at any time in any one year. Although, I understand that there is a potential for significant adverse effects from fine sediment to occur, this probability in a large storm event beyond the environmental control design is unlikely, rather it is temporary discharges that may occur from blocked or failed drains. These discharges are very temporary and through rigorous monitoring can result in avoidance and reductions in actual and potential adverse effects on the receiving environments. Thus, further conditions will be placed above the CEMP of SH195013 that will incorporate further monitoring of not only the pond discharges and erosion and sedimentation control measures but of the receiving environments so that issues are identified in a timely manner.

In arriving at this conclusion I have considered the intent of the NRMP through policy DO19.17 effect of land use activities on surface water bodies. The purpose of this policy is to minimise and as far as possible, avoid the potential for contamination of surface water bodies. This is again mirrored in DO13.1.2 sedimentation that adverse effects need to be managed.

In conclusion and in my opinion based on the assessments and opinions provided by both the professional expertise of those acting on behalf of the applicant and Council's professional experts, it is considered that the applicant has demonstrated that they will take all practicable measures to avoid or mitigate adverse effects of erosion and sedimentation on the wider environment in accordance with GD05 which is considered current industry best practice.

Given the low probability and the likely temporary nature of any sediment discharge due to the conditions of SH195013 and on this consent which will require constant monitoring of the weather patterns, the erosion and sediment controls onsite and the sensitive receiving environments. The level of effects that may occur from the discharge of sediment from the sediment ponds will be less than minor, whilst any other accidental discharges will be managed and temporary. Therefore, I consider that the potential for an adverse effect from the accidental discharges will be no more than minor on the wider environment.

#### **Effects from the discharge of flocculant (Poly Aluminium Chloride or PAC) on the wider environment**

Given the proximity to the CMA Mr. Lovell had provided reasoning for the use of PAC rather than potential other organic flocculants. The response stated



We believe that the *organic* flocculant referred to in the question is chitosan-based product - Vital Eco Super Floc. Whilst, testing of such chitosan flocculants carried out overseas has shown that it provides superior results for certain applications (commonly wastewater or industrial waste liquids) testing carried out previously by our flocculation professional (Campbell Stewart of Southern Skies Ltd) who is one of the most experienced practitioners in the country, has stated that the chitosan based product generally gives poor flocculation results for stormwater runoff in comparison to the two alternatives above which are industry standard. In all previous bench tests carried out by Southern Skies for other sites across the country, this *organic* flocculant has never provided better flocculation of sediment than the two alternatives tested.

We are of the opinion that the efficacy of chitosan based flocculants has not been proven for this application in New Zealand, and that use PAC will provide better environmental outcomes than the *organic* flocculant that council is referring to.

This reasoning is accepted by both Council's Water Quality Scientist and myself, thus it is the effects of PAC that need to be considered.

The assessment from the applicant's ecologist which states *"Given pH conditions within proposed discharge waters (expected to be in the range 6.5–7.9), and provided the discharge is infrequent and is managed as described by Tonkin+Taylor (Discharge Consent RFI response-RM205043 - 29 April 2020), available dilution in receiving waters (i.e. both freshwater and marine, the latter albeit tidally constrained) is expected to be adequate to reduce residual dissolved aluminium concentrations to levels below appropriate thresholds<sup>3</sup> (ANZECC 2000). On this basis, the overall risk that residual unbound flocculant will result in adverse effects in the marine receiving environment is considered to be very low.*

Both I and Council's Water Quality Scientist, Mr. Fisher concur that given the responses provided in the application that this response is sufficient in its assessment. Therefore, the adverse effects from the discharge of PAC on the water quality of Oldham Creek and the Coastal Marine Area will be less than minor.

### **Overall Actual and Potential Adverse Effects Assessment**

The application in which earthworks that are subject to this application may result in a temporary discharges to the Coastal Marine Environment or the freshwater environment of Oldham Creek will be less than minor as according to the information provided in this application and as concluded by the applicant's ecologist Mr. Ben Robertson which has concluded from his assessment *"Fine sediment/flocculant discharges from earthworks/ponds are expected not to have an adverse effect on benthic ecology within the ZOI areas or receiving water quality beyond a reasonable mixing zone. Any ecological or water quality effects are expected to be less than minor."*

There is concern from Mr. Fisher on the significant effects that may result from the discharge of sediment in a large rain event outside the design erosion and sedimentation controls onsite. As stated previously in this assessment, the quantifying the adverse effects of a discharge is impractical. The applicant has demonstrated in this application and that of all associated bulk earthwork consents that the design of the sediment control systems meet the design criteria not only of GD05 but that of the NTESCG best practice. The NTESCG is not a statutory document but is considered to provide guidance in respect to the best practicable measures to mitigate the adverse effects of erosion and sedimentation on the sensitive receiving environments present with the Nelson Tasman region.

The design size of the erosion and sediment controls meet the design criteria in which the chance of a storm event exceeding the controls is less than 2.5%. Therefore, it is



more appropriate to consider the potential effects not on sediment generated but of a probability of such an event occurring. Given this low risk probability, I consider the potential adverse effects of a discharge in a large event to likely be significant, but temporary and with a very low probability of actually occurring. Thus, I consider the potential effects associated with the discharge will be no more than minor on the wider environment.

The applicant provided a 'proof of consultation' from Ngati Kuia that highlighted that *"...The development of the site will require land disturbance increasing the risk of sediment entering the coastal environment which will need to be avoided and remedied should that occur. Sedimentation and nutrification of waterways erodes the relationship Maori have to that environment and can make traditional uses of those areas as mahinga kai risky to human health. Effectively exclusion by pollution."*

Relevant recommendations to mitigate any potential adverse effects included the following:

- *As far as practicable avoid the discharge of sediment or sediment laden runoff into waterways and the Coastal Marine Area.*
- *Ensure sediment is captured during construction.*

Te Atiawa has stated support for the proposal and also agreed to the recommendations noted by Ngati Kuia adding that the applicant apply sound engineering practice to avoid the discharge of sediment or sediment laden runoff into the waterways and the Coastal Marine Area.

The applicant has provided erosion and sediment control plans, strategies for monitoring and contingency measures in large rain events from suitably qualified geo-professionals. Thus, the recommendations are being adhered to by the applicant and are conditions of SH195013 and to be placed on this consent if granted under section 104 of the Act.

Although each iwi of the statutory acknowledgement has not provided a response to the application<sup>6</sup> it is considered that they intrinsically share the same cultural values in respect to the coastal marine area as that of Ngati Kuia and Te Atiawa.

I can therefore reasonably conclude that no land within the Statutory Acknowledgment Area of Te Tau Ihu will be adversely affected and thus neither will any person to a degree which is considered minor or more than minor.

The discharge of sediment and flocculant to land where it will enter Oldham Creek or the Coastal Marine Area is not considered to impact on any specific properties rather it is considered that the key persons with an interest in the application would be:

- The iwi of Te Tau Ihu
- Department of Conservation
- Forest and Bird
- Any other group with an interest in the Nelson Haven and/or freshwater environments

The CMA of the Nelson Haven as noted in this report is a Statutory Acknowledgment Area. The conclusion of the actual and potential adverse effects upon the iwi of Te Tau

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<sup>6</sup> All iwi of Te Tau Ihu are provided a list of applications to Council and the opportunity to receive a copy.



Ihu have been considered in the notification decision report which conclude adverse effects will be less than minor if the following recommendations are provided for:

- *As far as practicable avoid the discharge of sediment or sediment laden runoff into waterways and the Coastal Marine Area.*
- *Ensure sediment is captured during construction.*

As for the Department of Conservation, Forest and Bird and other conservation/environmental groups with an interest in the Nelson Haven and freshwater environments. It is considered that the applicant has clearly demonstrated that all practicable measures will be taken to prevent the discharge of sediment into the Coastal Marine area as well as Oldham Creek.

It is therefore considered that as the potential adverse effects to the Coastal Marine Area will be no more than minor, the level of the potential adverse effect upon these groups will be minimal as there is nothing more that can be done to avoid or mitigate the adverse effects of the earthworks and construction activities.

Given this, I can conclude that the potential adverse effects upon the above listed 'persons'<sup>7</sup> will be less than minor.

### **Actual and Potential Positive Effects**

I have considered whether the application will result in any positive effects. The nature of the activity is one in which minor adverse effects will result which cannot be mitigated being fine sediment that will discharge into the CMA and freshwater environments. However, the discharges will allow the proposed residential developments within the residentially zoned land to be established. It was expressed by Mr. Lovell the Geo-professional, that under natural conditions on the site, using *"the Universal Soil Loss Equation (USLE) the existing sediment yield from the site to the Nelson haven is estimated to be 36t/annum. This is approximately 0.36% of the total amount of sediment estimated to enter the Haven. Post development and it the long term the residentially developed land will have a lower silt yield."*

I concur that in the longer term, there will be effectively less sediment coming off the catchments and discharging into the CMA or Oldham Creek and could be considered to be a positive effect on the environment. This is not to fully state intensification of land will result in positive effects to sensitive receiving environments because of the change of land form. As that consideration of whether the quality of stormwater in a residential environment to that of sediment is not a matter subject to this application rather the amount of sediment entering these environments will be less.

Given the above, I further add that this land is zoned residential with anticipation that development would occur at some point in time. The granting of this permit subject to conditions of consent that require robust Construction and Environmental Management Plans to be implemented to mitigate the potential adverse effects will result in land being used in effective manner to provide for further housing in a time of housing shortages. Thus, this application will allow the applicant to give effect to housing supply.

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<sup>7</sup> includes the Crown, a corporation sole, and also a body of persons, whether corporate or unincorporated under the Act.



## Overall Effects Assessment

I have considered the application in context of the Nelson Resource Management Plan 2004 and conclude that the applicant is and will take every practicable measure to ensure that adverse effects are mitigated through robust environmental plans as conditions of consent.

This consent has also added further visual monitoring conditions of the outlets to the CMA and Oldham Creek in rain events that are either 30mm over a 24 hour period or 10mm per hour to ensure no control measures have failed that they are not aware of. The aim is to continually monitor the site to avoid or reduce any discharge from occurring.

This discharge permit applies a review condition in accordance with Section 128 of the Act allows Council to ensure the adoption of the best practicable options to mitigate any adverse effects upon the environment, arising from the generated effects of the activity. Or, if the Council deems that it is necessary to do so in order to deal with any adverse effect on the environment which may arise from the exercise of this consent, and which is appropriate to deal with at a later date.

## RELEVANT STATUTORY PROVISIONS

In accordance with section 104(1)(b) this application has been considered in the context of the planning documents below;

- a. National Policy Statements (NPSFM (2020));
- b. New Zealand Coastal Policy Statement (NZCPS 2010);
- c. Regional Policy Statement (NRPS 1997);
- d. District Plan (NRMP 2004);

Each of these statutory instruments is discussed in further detail below, appropriate to the instrument's relevance.

### National Policy Direction

The NZCPS, NPSUD (2020) and NPSFM (2014, 2017 and 2020) are relevant to this proposal.

#### NZCPS

In respect to this application, the NZCPS seeks to provide guidance that balance the integrity, form, function and resilience of the coastal environment ecosystems whilst enabling people and communities to provide for their social, economic and cultural wellbeing and their health through subdivision and land use development.

Policy 6 directs decision makers to consider matters in relation to activities affecting the coastal environment and marine area of which the following are considered relevant:

- recognise that the provision of infrastructure is important to the social, economic and cultural well-being of people and communities;
- Rate of growth and built development to provide for population growth without compromising the coastal environment;



Whereas Policies 21 to 23 are relevant to Water Quality. It is considered that through the imposed conditions placed on this consent and that of the associated earthworks consents that this proposal will meet the intent of these policies.

#### NPSFM

The proposal through earlier considerations has been undertaken in respect of the NPSFM 2014 (as amended in 2017). Key requirements of the NPSFM 2014 were to:

- 'consider and recognise' Te Mana o te Wai in freshwater management;
- identify and reflect tangata whenua values and interests in the management of freshwater;
- safeguard freshwater's life-supporting capacity, ecosystem processes, and indigenous species;
- maintain or improve the overall quality of freshwater; and
- take an integrated approach to managing land use, freshwater and coastal water.

On September 3 2020, the NPSFM 2017 was replaced by the NPSFM 2020. Given the NRMP is embedded by the NPSFM 2014 (and 2017) policies, consideration has also been given to the NPSFM 2020 which is also taken into consideration in my assessment below.

The NPSFM 2020 requires Council to apply an effects management hierarchy to manage any loss of extent or values (including cumulative effects and loss of potential value) on a river as a result of the proposal, particularly in relation to the values of ecosystem health, indigenous biodiversity, hydrological functioning, Māori freshwater values, and amenity.

Part 2 (Objective and Policies), Sub-part 2.1, of the NPSFM 2020 states the objective of the NPSFM 2020 is to *ensure natural and physical resources are managed in a way that prioritises:*

- *first, the health and well-being of water bodies and freshwater ecosystems;*
- *second, the health needs of people (such as drinking water); and*
- *third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.*

Subsection 4.3 of the NPSFM 2020 refers to the extent that existing regional policy statements and plans may already implement the NPSFM 2020, such that the NRMP may remain consistent with the NPSFM 2020 even though wording or terminology may vary to that contained within the NPSFM 2020.

There is a lot of consistency between the Objectives and Policies of the NRMP and the NPSFM 2020. On the whole, the application does not explicitly result in a discharge to a freshwater environment but rather they note that a temporary discharge may occur at some point over the duration of the earthworks. To avoid and mitigate this discharge potential, conditions have been placed on the consent to undertake additional monitoring of the erosion and sedimentation controls beyond that required in a certified CEMP. This is considered reasonable given that the CEMP will also contain detailed a DESC to avoid, mitigate and remedy adverse effects on the environment.

There is contrast in the NRMP and NPSFM 2014 as any potential adverse effects on a water body takes priority over the needs of development. In my assessment of the NRMP, I am not convinced that the freshwater rules of the NRMP give effect to the



NPSFM 2017 or 2020 but consider that the management and mitigations put forward meet the intent of the NPSFM 2014 and 2017.

I have also considered the at a late stage in the application the proposal amended for this permit to cover all consented earthworks in which there is a certified CEMP. These future earthworks applications will have to address the NPSFM 2020 in which this permit will be seen to be consistent with.

The applicant has engaged with Ngati Kuia as a part of the earthworks consent application (SH195013) which contemplated this potential. Recommendations were provided by Ngati Kuia in which Te Atiawa o Te Waka a Maui also supported along with the application. These recommendations were to undertake the current best practice methods of erosion and sedimentation control to reduce and minimise the adverse effects on the environment. These controls are a subject to the CEMP and relate to the conditions on this consent.

### **Regional Policy Statement and District / Regional Plans**

The NRMP is the combined District and Regional Plan for Nelson, which gives effect to the NRPS. In terms of consistency with relevant objectives and policies in the NRPS and NRMP, the assessment of the Applicant as detailed in the AEE is generally well considered, in relation to the:

- NRPS 1997; and
- NRMP 2004.

I concur with the assessments provided but note that the proposal is not just to discharge in a large storm event but for the sediment that may discharge into the CMA from the sediment ponds below Ledger Road, and temporary discharges that may enter both the CMA and Oldham Creek from failed control measures. Therefore, it is still concluded that sediment discharges will be avoided as far as practicable and that the values contained in these environments will be maintained.

### **Part II Matters**

The Council has taken into account the relevant principles outlines in sections 6, 7 and 8 of the Act and it is considered that granting this resource consent achieves the purpose of the Act as presented in section 5.

### **Notification and Affected Parties**

The Council has decided under Section 95D of the Act, that the adverse environmental effects of the proposed activity are no more than minor and there are no persons adversely affected by the proposal. The application has therefore been processed without notification.



**Reporting Officer: Vince Matschke**

Position: Planner

Signed



Date

02/12/2020

This resource consent is **granted** on 02 December 2020 under delegated authority from Nelson City Council by:



Adrian Ramage  
**Team Leader Resource Consents**

Adrian Ramage  
Resource Consents Unit  
Nelson City Council  
(Authorised Officer Pursuant to  
Delegation)