Memorandum

То	Commissioner
From	Colin McLellan, Consents Manager, Taranaki Regional Council and
	Kathryn Hooper, Consultant Planner, Landpro Limited
Consent	Application 17-0429.1.0(A)-(E)
Document	Final Summary - TRC
Date	30 July 2018

1. Introduction

- 1. The New Zealand Transport Agency (NZTA) lodged applications with the Taranaki Regional Council ('TRC') for a total of 58 consents associated with the proposed Mt Messenger Bypass on 15 December 2017. The TRC's s42A report was provided on 18 May 2018.
- 2. This additional report provides an update to the Commissioner on progress and changes made as a result of further information provided and further discussions with NZTA since the original s42A report was completed, and in response to their evidence and that of submitters.
- 3. It is considered appropriate to start by revisiting the key issues identified in the TRC's original report. These are listed and progress made since the s42A report was prepared is discussed briefly in Table 1 below.

Key Issue Identified in Original	Progress since s42A report	Discussion
Report		
Undertaking earthworks of this scale	Discussions between TRC	TRC remain concerned about monitoring of
in the location proposed, the	and NZTA erosion and	sediment discharges, in particular the
challenges presented by the	sediment control experts	proposed baseline monitoring. Our
topography and the climate of the	have occurred, including a	comments on proposed conditions relating
area and the need to address these	site visit.	to sediment discharges reflect this.
by way of clear and enforceable		
consent conditions that are consistent		
with other earthworks consents in the		
Taranaki Region.		

Key Issue Identified in Original	Progress since s42A report	Discussion
Report		
Clearing vegetation and diverting streams in the headwaters of two catchments, which relies significantly on offsetting to address adverse environmental effects. The offsetting works are proposed to occur on land that is not controlled by NZTA which makes conditioning these activities difficult to achieve in order for conditions to be valid and certain.	Regular updates on progress with DoC, Ngati Tama and NPDC ecology experts relating to the offset calculations and final area.	The offsetting requirements are inherent in the mitigation offered by NZTA. The land areas involved and their ownership are shown in Figure 1 of Mr Roger MacGibbons Supplementary Evidence and shows that the majority of the PMA land is either owned by Ngati Tama, DoC or the NZTA. We would like to hear how the NZTA is progressing with securing access to the areas of private land indicated in Figure 1, along with a discussion about what the area may look like if the private land access cannot be secured, and hear from DoC in relation to accessing DoC land. The riparian planting and fencing proposed has not been discussed in great detail, with an obvious focus on the PMA. The TRC notes that the riparian management proposed is one of the key mitigations for the culvert and diversion activities, and some indication from NZTA on how progress with securing access to this land would also be helpful. We anticipate that our initial concerns, which included what enforcement action may look like should the NZTA be unable to secure the land to offset the effects of the activities, will be able to be worked through, if the need arises.
The need to formalise the agreements made with Te Runanga	Significant progress has been documented in the	The TRC notes Te Runanga o Ngati Tama has changed their submission from neutral
O Ngāti Tama, of which few details are known at the time of writing this report, but upon which the project is reliant in terms of mitigating the potential adverse cultural effects associated with the project.	evidence.	to support. We therefore consider that this indicates that agreements with Ngati Tama are well underway, and this largely addresses our concerns.
The applications have a heavy reliance on the generation of plans to manage various aspects of the activities, and while considered important in achieving environmental	All management plans have been provided, with a mind to approving these through the consenting process.	Performance standards are outlined in the management plans. TRC retain some concerns with how the NZTA will demonstrate compliance with these

Key Issue Identified in Original	Progress since s42A report	Discussion
Report		
performance, the level of		standards, which are detailed further in this
environmental performance and		report.
standards that these plans are		Where the TRC has concerns about any of
intending to achieve is important.		the management plans, we have detailed
		these in this report also.

DRAFT CONDITIONS

4. There has been significant discussion in relation between TRC and NZTA in relation to proposed activities and proposed consent conditions and in large part the TRC and NZTA has agreed on these. The only outstanding issues that remain are detailed in Table 2.

Table 2: Comments on Draft Conditions

Condition	Condition Wording	Proposed Wording	Reasons
Reference (NZTA			
Supplementary			
Evidence)			
Definitions PREPARATORY	Initial works to enable Establishment Works and Construction Works, such as:	Initial works to enable Establishment Works and Construction Works, such as:	We agree with bullets 1-3.
WORKS	 site surveys; investigations (including geotechnical investigations); monitoring; and where the Permitted Activity standards in the operative Taranaki Regional Plans / New Plymouth District Plan are met a SCWMP has been prepared and the required controls are implemented, and vegetation clearance is in accordance with the ELMP and CWMP, land disturbance activities to establish site access, access tracks, construction yards, laydown areas and spoil disposal sites and associated erosion and sediment controls. 	 site surveys; investigations (including geotechnical investigations); and monitoring. 	We have concern about bullet 4 and seek that this is removed. Permitted activities can be undertaken regardless, and a condition confuses this situation for enforcement officers and the public.

Condition Wording	Proposed Wording	Reasons
The Consent Holder shall prepare procedures for	The Consent Holder shall prepare procedures for	We have added 'other contaminants' to cover the
incident management that outline how the Consent	incident management that outline how the Consent	potential that contaminants that are not hazardous,
Holder will manage the incident and notify the Chief	Holder will manage the incident and notify the	but do cause environmental concerns in
Executive, TRC of:	Chief Executive, TRC of:	waterways, may be discharged and can cause as
a) discharges from non-stabilised areas that are not	a) discharges from non-stabilised areas that are	much harm.
treated by erosion and sediment control measures	not treated by erosion and sediment control	
as required by the Construction Water Management	measures as required by the Construction Water	
Plan; and / or	Management Plan; and / or	
b) failure of any erosion and sediment control	b) failure of any erosion and sediment control	
measures; and / or	measures; and / or	
c) discharge of a hazardous substances, including	c) discharge of a hazardous substances <u>or any</u>	
cement, to a water body; and / or failure of any	other contaminants, including cement, to a water	
temporary stream diversion; and / or	body; and / or failure of any temporary stream	
e) any other event that occurs in contradiction to a	diversion; and / or	
current management plan.	e) any other event that occurs in contradiction to a	
The procedures shall be incorporated into the	current management plan.	
Management Plans required under Condition GEN.9	The procedures shall be incorporated into the	
and provided to the Chief Executive, TRC on	Management Plans required under Condition	
request.	GEN.9 and provided to the Chief Executive, TRC	
	on request.	
	The Consent Holder shall prepare procedures for incident management that outline how the Consent Holder will manage the incident and notify the Chief Executive, TRC of: a) discharges from non-stabilised areas that are not treated by erosion and sediment control measures as required by the Construction Water Management Plan; and / or b) failure of any erosion and sediment control measures; and / or c) discharge of a hazardous substances, including cement, to a water body; and / or failure of any temporary stream diversion; and / or e) any other event that occurs in contradiction to a current management plan. The procedures shall be incorporated into the Management Plans required under Condition GEN.9 and provided to the Chief Executive, TRC on	The Consent Holder shall prepare procedures for incident management that outline how the ConsentThe Consent Holder shall prepare procedures for incident management that outline how the ConsentHolder will manage the incident and notify the ChiefHolder will manage the incident and notify the ChiefExecutive, TRC of: a) discharges from non-stabilised areas that are not treated by erosion and sediment control measures as required by the Construction Water Managementa) discharges from non-stabilised areas that are not treated by erosion and sediment control measures as required by the Construction Water ManagementPlan; and / or b) failure of any erosion and sediment control measures; and / or c) discharge of a hazardous substances, including cement, to a water body; and / or failure of any temporary stream diversion; and / or e) any other event that occurs in contradiction to a current management plan.c) discharge of a hazardous substances or any other contaminants, including cement, to a water body; and / or e) any other event that occurs in contradiction to a current management plan.e) any other event that occurs in contradiction to a current management plan.The procedures shall be incorporated into the Management Plans required under Condition GEN.9 and provided to the Chief Executive, TRC on request.The provided to the Chief Executive, TRC on GEN.9 and provided to the Chief Executive, TRC on center, TRC

GEN.10	The Consent Holder shall provide to the Chief	No Change proposed, see comment.	Comment: If the plans are NOT approved as part
	Executive, TRC all of the management plans		of the consent process, the conditions prepared on
	required under Condition GEN. 9 at least 5 working		this premise will need revisiting to allow time for
	days prior to commencement of the relevant Works.		the necessary approval from TRC. We recommend
	The management plans:		40 working days.
	a) provide the overarching principles, methodologies		
	and procedures for managing the effects of		
	construction of the Project to achieve the		
	environmental outcomes and performance standards		
	required by these conditions; and		
	b) shall be maintained and implemented		
GEN.12	With the exception of the three SCWMPs provided at	a) With the exception of the three SCWMPs	The TRC considers it more appropriate to approve
	the Hearing (being SCWMPs for: Fill Disposal Site 4;	provided at the Hearing (being SCWMPs for: Fill	rather than certify.
	Construction Yard; Crossing at CH570) listed below,	Disposal Site 4; Construction Yard; Crossing at	
	the Consent Holder shall provide all SCWMPs to the	CH570) listed below, the Consent Holder shall	TRC seeks more certainty than proposed
	Chief Executive, TRC, for certification at least 10	provide all SCWMPs to the Chief Executive, TRC,	amendments being 'considered'. The TRC will
	working days before the commencement of Works to	for approval at least 10 working days before the	either approve the SCWMP's or will not, and if not
	which the SCWMP will apply.	commencement of Works to which the SCWMP	they will give reasons why, and require the plans to
	The Consent Holder shall consider any comments	will apply.	be changed and re-submitted.
	received from the Chief Executive, TRC when		
	finalising the SCWMP. If the Consent Holder has not	b) Works subject to SCWMP's shall not	NZTA's suggestion that SCWMP's can be
	received comments from the Chief Executive, TRC	commence until the associated SCWMP is	implemented without approval is tantamount to the
	within 10 working days of providing the SCWMP, the	approved.	consent holder writing the conditions after the
	Consent Holder may finalise the SCWMP and		consent is issued, which is clearly not appropriate.
	implement it accordingly.		

GEN.13	The Consent Holder may make minor reasonable	Delete GEN.13 and combine with GEN.14 as	Our concerns with GEN.13 and GEN.14 are that
	amendments to the finalised management plans at	follows:	there is potential for disagreement between NZTA
	any time. A minor amendment is any amendment		and TRC regarding what is minor and what is
	where the adverse environmental effect arising from	The Consent Holder may make amendments to the	material, and that the TRC should be making this
	the amendment is the same or less than the effect	management plans, subject to the approval of the	decision, not NZTA. Therefore it will be necessary
	that would result in the absence of the amendment.	Chief Executive, TRC.	to see all proposed changes.
	In addition, any changes to the management plans		
	shall remain consistent with the overall intent of the	a) Any amendments to the management plans	The TRC considers it more appropriate to approve
	final management plan. The Consent Holder shall	shall be consistent with the overall intent of the	rather than certify.
	provide the Chief Executive, TRC with a copy of any	management plan.	
	amendment as soon as practicable and before		If the TRC consider that the changes to the
	Works associated with that amendment are	b) in the event of an amendment to a management	management plans are outside the scope of the
	implemented.	plan under condition GEN.14(a), the Consent	originally submitted information, and are
GEN.14	The Consent Holder may make material	Holder must submit the amendment to the Chief	inconsistent with the overall intention of the
	amendments to the management plans at any time,	Executive, TRC for certification 20 working days	management plans, then the change will trigger
	subject to the certification of the Chief Executive,	before the commencement of the relevant Works.	then need for a variation to consent.
	TRC. A material amendment is any amendment that	Mandre was ffer that the survey descent was a	
	is in general accordance with condition GEN.1 but is	Works unaffected by the amendment may	
	not a minor amendment in accordance with condition	continue.	
	GEN.13.		
	a) Any material amendments to the management		
	plans shall be consistent with the overall intent of the		
	management plan.		
	b) In the event of an amendment to a management		
	plan under condition GEN.14(a), the Consent Holder		
	must submit the amendment to the Chief Executive,		

	TRC for certification 20 working days before the		
	commencement of the relevant Works.		
	Works unaffected by the amendment may continue.		
	Advice note:		
	The Chief Executive, TRC will carry out best		
	endeavors to consider the management plans within		
	20 working days, noting that expert input may be		
	required from the Transport Agency before		
	certification can be provided. TRC shall, within a		
	reasonable timeframe either confirm in writing to the		
	Consent Holder that the material amendment is		
	certified, declined, or request that the Consent		
	Holder incorporate changes suggested by the		
	Council. Where the Consent Holder and TRC are		
	unable to agree on the finalisation of material		
	amendments to management plans, the resolution		
	process stipulated under Condition GEN.17 shall be		
	followed. To avoid any doubt, condition GEN.17		
	applies to this condition.		
GEN.15	(a) Preparatory Works that are a Permitted Activity in	DELETE	See previous comments re. definition of
	the Taranaki Regional Plans can be carried out at		preparatory works. This condition is not necessary
	any time, provided the Permitted Activity standards		and may cause confusion.
	are met.		
	(b) At least 5 days prior to the commencement of		
	any Preparatory Works under this Condition, the		

		1	
	Consent Holder shall notify the Chief Executive, TRC		
	that it intends undertaking the Preparatory Works,		
	and shall confirm that all measures required by the		
	management plans described in Condition GEN. 9		
	will be implemented over the duration of the Works.		
GEN.17	a) In the event of any dispute, disagreement or	DELETE	This proposed condition needs to be deleted as it
	inaction arising about the content or implementation		removes the TRC's regulatory authority and
	of the management plans, matters shall be referred		regulatory enforcement functions.
	in the first instance to the Chief Executive, TRC, and		
	to the Consent Holder's Construction Manager (as		
	described in the CEMP), to determine a process of		
	resolution.		
	b) If a resolution cannot be agreed under (a) within		
	15 working days, the matter shall be referred within		
	10 working days to an independent appropriately		
	qualified person, acceptable to both parties		
	('mediator'), setting out the details of the matter to be		
	referred for determination and the reasons the		
	parties do not agree.		
	c) The mediator shall, as soon as possible, issue a		
	decision on the matter.		
	d) The decision of the mediator on the		
	implementation of the management plan is binding		
	and shall be implemented by the Consent Holder.		
	e) The dispute resolution process above will be		
	applied before any formal enforcement action is		
	taken by TRC, except in urgent situations.		

SED.2	The Consent Holder shall have in place until the	No Change proposed, see comment.	Comment: TRC cannot agree to this condition at
	Completion of Construction Works a Construction		this stage as we do not agree on the CWDMP
	Water Management Plan (CWMP) that identifies how		attached to the CWMP.
	all Works shall be undertaken and addresses:		
	a) The procedures for determining staging and		
	sequencing of earthworks.		
	b) Identification of a suite of appropriate structural		
	and non-structural erosion and sediment control		
	measures to be installed prior to and during all		
	Works.		
	c) The design specifications for all erosion and		
	sediment controls to be implemented.		
	d) A procedure to establish and define minor on the		
	ground changes to erosion and sediment control, in		
	accordance with the intent of the CWMP.		
	e) The procedures for decommissioning the erosion		
	and sediment control measures.		
	f) Methods for amending and updating the CWMP as		
	required.		
	Advice note: The CEMP provides additional		
	management details on personnel, training,		
	emergency response, complaints management,		
	construction activities, reporting and review		
	procedures		

SED.7	The Consent Holder shall design, construct and	The Consent Holder shall design, construct and	The additional points listed are those that TRC
	maintain all erosion and sediment control measures	maintain all erosion and sediment control	monitoring staff and experts have identified as
	in general accordance with the Transport Agency's	measures in general accordance with the	important to document upfront as consent
	Erosion and Sediment Control Guidelines for State	Transport Agency's Erosion and Sediment Control	conditions, so that we can have confidence that the
	Highway Infrastructure – Construction Stormwater	Guidelines for State Highway Infrastructure –	standards that the sediment controls set out to
	Management 2014. , including:	Construction Stormwater Management 2014,	achieve are achieved.
	a) Directing of all sediment laden runoff and	including:	
	groundwater during Construction Works shall be to	a) Directing of all sediment laden runoff and	
	Sediment Retention Ponds (SRPs), Decanting Earth	groundwater during Construction Works shall be to	
	Bunds (DEBs), or temporary sediment retention	Sediment Retention Ponds (SRPs), Decanting	
	devices such as container impoundment systems;	Earth Bunds (DEBs), or temporary sediment	
	b) All DEBs and SRPs that serve a catchment area	retention devices such as container impoundment	
	greater than 500 m2 shall be treated using a liquid	systems;	
	flocculant and a rainfall activated dosing system.	b) All DEBs and SRPs that serve a catchment	
	Flocculation shall be undertaken and managed in	area greater than 500 m2 shall be treated using a	
	accordance with the certified SCWMP.	liquid flocculant and a rainfall activated dosing	
	c) All SRPs and DEBs shall be fitted with floating	system. Flocculation shall be undertaken and	
	decants that are designed to discharge at a rate of 3	managed in accordance with the approved	
	litres per second per ha of contributing catchment;	SCWMP.	
	d) All SRPs shall contain measures to cease	c) All SRPs and DEBs shall be fitted with floating	
	discharge (e.g. decant pulley systems) and a forebay	decants that are designed to discharge at a rate of	
	with a minimum volume of 10% of the pond volume.	3 litres per second per ha of contributing	
	Advice note: Any modifications to the above shall be	catchment;	
	subject to certification in accordance with Condition	d) All SRPs shall contain measures to cease	
	GEN.12.	discharge (e.g. decant pulley systems) and a	
		forebay with a minimum volume of 10% of the	
		pond volume.	

e) All erosion and sediment control devices
shall be located outside the 20 year Annual
Return Interval (ARI) flood level, unless no
other viable location exists;
f) Pumping of all sediment laden runoff and
groundwater during Construction Works shall
be to Sediment Retention Ponds (SRPs),
Decanting Earth Bunds (DEBs), or temporary
sediment retention devices such as container
impoundment systems;
g) All DEBs shall have a volume no less than 3
m ³ for every 100 m ² of contributing catchment;
h) All SRPs shall have a volume no less than 3
m ³ for every 100 m ² of contributing catchment
and shall contain decant pulley systems and a
forebay with a minimum volume of 10% of the
pond volume;
i) All dirty water diversion channels shall be
designed and constructed with sediment
sumps with a minimum volume of 2m ³ per
sump and spaced at intervals of no more than
50m.
Advice note: Any modifications to the above shall
be subject to certification in accordance with
Condition GEN.12.

NEW SED.X	Not Proposed	Re-vegetation and/or stabilisation of all	This was a condition originally proposed, and had
		disturbed areas is to be completed in	been deleted by NZTA in their final suite of
		accordance with the measures detailed in the	conditions. TRC would prefer to see this
		'Erosion and Sediment Control Guidelines for	documented upfront in the conditions (as opposed
		State Highway Infrastructure – Construction	to it being solely addressed in the management
		Stormwater Management'; New Zealand	plans).
		Transport Agency 2014.	
			The reason for this is that this is one of the key
			criteria for consideration by the TRC for mitigation
			of sediment discharges from both the exposed
			earthworks, and the areas of vegetation clearance.
SED.11	The Consent Holder shall undertake monitoring of	The Consent Holder shall undertake monitoring of	The changes we have suggested to this condition
	construction water related discharges in accordance	construction water related discharges in	reflect the concerns we have regarding the
	with the Construction Water Discharges Monitoring	accordance with the Construction Water	CWDMP, which are detailed further below.
	Programme (set out as an Appendix C to the	Discharges Monitoring Programme (set out as an	
	CWMP). The Construction Water Discharges	Appendix C to the CWMP). The Construction	
	Monitoring Programme shall include:	Water Discharges Monitoring Programme shall	
	(i) Baseline water quality monitoring undertaken prior	include:	
	to the commencement of Works;	(i) Baseline water quality monitoring undertaken	
	(ii) monitoring undertaken during the construction	prior to the commencement of Works;	
	period including both qualitative and	(ii) monitoring undertaken during the construction	
	quantitative monitoring;	period including both qualitative and	
	(iii) real-time continuous turbidity (NTU) monitoring	quantitative monitoring;	
	undertaken at a single location in the Mimi River and	(iii) real-time continuous telemetered turbidity	
	in the Mangapepeke Stream at a point downstream	(NTU) monitoring undertaken at a single location in	
	of the works. Provision shall be made in the	the Mimi River and in the Mangapepeke Stream at	
	Programme for data to be directly made available to	a point upstream and downstream of the works.	
		This telemetered information shall be made	

	the Chief Executive, Taranaki Regional Council on	directly available to the Taranaki Regional	
	request.	Council within 2 hours of being recorded.	
	(iv) monitoring response triggers and to the methods	(iv) Telemetered turbidity (NTU) monitoring and	
	for assessing effects on the receiving downstream	flow in to and out of two SRPs (one in the Mimi	
	environment;	River and one in the Mangapepeke Stream	
	(v) chemical treatment monitoring requirements;	catchment). These SRPs must be receiving	
	(vi) procedures for responds to the spillage or	runoff from active earthworks catchment	
	accidental discharge of sediment or contaminants to	associated with the main bypass works (i.e. not	
	an aquatic environment; and	associated with the disposal areas of the site	
	(vii) reporting requirements.	yards or compounds). This telemetered	
		information shall be made directly available to	
		the Taranaki Regional Council within 2 hours of	
		being recorded.	
		(v) monitoring response triggers and to the	
		methods for assessing effects on the receiving	
		downstream environment;	
		(vi) chemical treatment monitoring requirements;	
		(vii) procedures for responds to the spillage or	
		accidental discharge of sediment or contaminants	
		to an aquatic environment; and	
		reporting requirements.	
NEW DIV.X		The new stream channel shall have a flow capacity	The LEDF does not make specific statements
		no less than that of the existing stream channel.	about the hydrological requirements of new stream
		Where floodplain flow is interrupted, additional	channels, and the TRC would be more comfortable
		waterway capacity shall be provided in	with this being clear upfront in the conditions.
		compensation.	

TCV.9	Where feasible, the temporary culverts shall allow for	The temporary culverts shall allow for fish passage	TRC seek more certainty than 'where feasible'
	fish passage in accordance with the ELMP.	in accordance with the ELMP.	implies.
PCV.3	The culvert structures authorised by this Consent	No change – query only	TRC question the need for 'more than minor' in this
	shall be designed, constructed and maintained in		condition. If it is to stay, definition of what
	such a manner so as to avoid causing any new or		constitutes 'more than minor' from NZTA's
	exacerbating any existing more than minor adverse		perspective as it relates to flooding would be
	flooding effects on adjacent and upstream land.		appreciated.
BRG.1	Bridges shall be constructed generally in accordance	The bridge shall be constructed generally in	Unsure why this has been changed to plural, when
	with Condition GEN.1.	accordance with Condition GEN.1.	the application is for one bridge.

Comments on evidence

- 5. Sentence 13(b) of Mr Graham Ridley's evidence states that TRC is comfortable with the CWMP and it can therefore be approved through the hearing process. This is not the case as part of the CWMP is the monitoring programme appended to it, to which we disagree with in some areas. Of note the Department of Conservation have also identified this as not appropriate for the scope of the works.
- 6. We have reviewed the evidence from the Department of Conservation and note that they have raised similar concerns to TRC in relation to sediment controls and monitoring.
- We note that Ngati Tama have changed their submission from neutral to support.

CWMP

8. Reflecting comments on conditions we note that throughout the management plans, TRC would like the word certification replaced with approval. In particular this appears on Page 38 – Figure 7.1 states that winter works will be assessed and will be notified to TRC for certification.

CWDMP

- 9. In table 4.1 *'Continuous Stream Monitoring'* it states that *'continuous turbidity meter installed on site. Ability to manually download data on a regular basis'*. TRC believe that this creates an unacceptable delay to react to trigger events and therefore real-time telemetered monitoring is necessary.
- 10. In relation to the downstream monitoring sites proposed in the CDM, TRC are satisfied with the site on the Mangapepeke Stream, but not the site south of the alignment on the Mimi River. This is shown at WQ5. TRC would like this moved to WQ3, to avoid the influence of a tributary which enters the Mimi River between WQ3 and WQ5. This tributary provides a significant inflow that is from a catchment that is not affected by construction works. The data recorded at this site would therefore not be representative of flow from the construction works.

- 11. TRC don't believe that there is any relationship between the downstream sites and the allocated 'control sites' and therefore the triggers associated with these comparisons are not appropriate. TRC is of the opinion that the correct approach is to have upstream sites identified and monitored.
- 12. NZTA has committed to a trigger level in the streams of greater than 20% increase in turbidity from control sites in 6.1.1 of the CDWMP. TRC have concerns about how the monitoring proposed will be able to demonstrate this, as follows;
 - a) While the provision of baseline data from the downstream monitoring sites is noted, this may not provide the data required to give confidence in the mitigation put in place. Having an upstream site to compare to, in the opinion of the TRC, is best practice and we would like this applied on this project.
 - b) We note that upstream sites for ecological monitoring (EM1 and EM4) have been identified. Could these sites be suitable for upstream continuous monitoring?
- 13. We note the DoC evidence suggesting that other stakeholders are given access to the real time telemetered data. As the regulator, TRC can require this. While we stop short of recommending this as a condition, we would like to encourage the NZTA to make the data freely available.
- 14. TRC do not consider grab samples provide confidence that the standards identified in the CWMP are being complied with. TRC want to see the monitoring of these ponds with real time telemetry to give confidence that the performance standard (as identified in 6.1.1 of the CWMP) for the ponds is being met, and to enable confirmation that they are performing as anticipated on a continuous basis, particularly during high rainfall events.
- 15. Grab sampling at appropriate times during rainfall events is likely to be hampered by delays due to the remote location, and by health and safety concerns (particularly at night).

16. To further describe why the TRC have these concerns, our site erosion and sediment control expert, Campbell Stewart – Southern Skies, makes the following comments:

In regard to the CDWMP, the grab sampling proposed by the NZTA is only triggered once a "trigger event" has occurred. Rain and storm events are variable and complex in intensity and duration. To achieve the stated objectives and outcomes in the CDWMP, to improve the ability to manage and fine tune onsite sediment management and to gain a better understanding of SRP performance, continuous data logging and telemetered reporting in my opinion need to be undertaken.

That way the turbidity of inflows and outflows from a SRP can be monitored and analysed through all discharge events. Acknowledging the cost of such systems, it would be useful to establish at least one continuous inflow and outflow monitoring system within each catchment (Mimi and Mangapepeke), supplemented with hand held monitoring of those SRPs (for calibration) and other SRPs during trigger events.

The grab sample that is proposed be taken at each monitoring location will be used to test TSS and establish a TSS – turbidity relationship. Such relationships can be difficult to develop and in the absence of continuous turbidity monitoring of outflow, cannot reasonably be used to extrapolate the likely sediment yield from a pond during a storm (as noted, the TSS at the time of the sample is only a snapshot of the variability that will occur throughout the storm).

17. We emphasise this is not a 'data gathering' exercise for the TRC and in our minds there is a need for transparency and accountability to the public, given the concerns they have raised. This would give us significantly more confidence that the sediment discharge effects are being effectively managed. The provision of real time telemetry enables the possibility of providing this data to other stakeholder groups.

Dust Management Plan

18. TRC's air quality expert has review this and generally has no concerns. One item however which TRC would like to see is further detail with regards to how NZTA intend to liaise with the sensitive dust receptors that they have identified in the receptor plan (3 dwellings).

Conclusion

19. We maintain our original position that we consider that the proposed activities can occur in a manner which is consistent with the purpose and principles of the RMA, providing certain standards and conditions are met. Our recommendation therefore remains to grant the consents sought, subject to conditions which are intended to address the effects identified and formalise the mitigation measures (including offsetting) proposed by NZTA. We have provided comments on draft conditions which we believe will ensure this is able to occur.