Rangitikei District Council
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Assets/Infrastructure Committee Meeting

Order Paper

Thursday 9 March 2017, 9.30 am

Council Chamber, Rangitikei District Council
46 High Street, Marton

Website: www.rangitikei.govt.nz **Email: info@rangitikei.govt.nz**

Chair
Cr Dean McManaway

Deputy Chair
Cr Ruth Rainey

Membership
Councillors Richard Aslett, Cath Ash, Nigel Belsham, Jane Dunn, Angus Gordon, Soraya Peke-Mason, Lynne Sheridan and Dave Wilson
His Worship the Mayor, Andy Watson (ex officio)
Tracey Hiroa (Te Roopu Ahi Kaa Representative)

Please Note: Items in this agenda may be subject to amendments or withdrawal at the meeting. It is recommended therefore that items not be reported upon until after adoption by the Council. Reporters who do not attend the meeting are requested to seek confirmation of the agenda material or proceedings of the meeting from the Chief Executive prior to any media reports being filed.

Rangitikei District Council

Assets and Infrastructure Committee Meeting

Order Paper – Thursday 9 March 2017 – 9:30 a.m.

Contents

The quorum for the Assets/Infrastructure Committee is 6.

Council's Standing Orders (adopted 3 November 2016) 10.2 provide: The quorum for Council committees and sub-committees is as for Council, i.e. half the number of members if the number of members (including vacancies) is even or a majority if the number of members is odd.

1 Welcome

2 Council Prayer

3 Apologies/Leave of Absence

4 Confirmation of order of business

That, taking into account the explanation provided why the item is not on the meeting agenda and why the discussion of the item cannot be delayed until a subsequent meeting, ... be dealt with as a late item at this meeting.

5 Confirmation of minutes

Recommendation
That the Minutes of the Assets/Infrastructure Committee meeting held on 9 February 2017 be taken as read and verified as an accurate and correct record of the meeting.

6 Chair's Report

A report will be tabled at the meeting.

File ref: 3-CT-13-4

Recommendation
That the Chair's Report to the Assets/Infrastructure Committee meeting on 9 March 2017 be received.

7 Adopted Strategic Intentions for the 2016-19 Triennium – work plan implications

The relevant pages from the adopted Strategic Intentions are attached for the Committee to determine a future work plan against the identified projects for the Committee.

8 Activity Management

Following discussion at the February 2017 meeting it was agreed that that Activity Management Templates would be amended by separating the Request for Service information and removing the reporting against the mandatory performance measures (these will be reported in the various Statement of Service Performance supplied to the Finance/Performance Committee throughout the year), leaving only the reporting against projects to be included in the order paper. The Request for Service information will be tabled at the meeting, along with a report on the performance of the Roading Contractor.

The Activity Management Templates (project reporting) for the following asset-based groups of activities are attached:

- Roading and footpaths
- Water (including rural water supplies)
- Sewage and the treatment and disposal of sewerage
- Stormwater drainage
- Community and leisure assets (including parks)
- Rubbish and recycling

Recommendation

That the activity management templates for February 2017 for Roading, Water (including rural water supplies), Sewerage and the treatment and disposal of sewage, Stormwater drainage, Community and leisure assets, and Rubbish and recycling be received.

9 Forestry Harvest Impact on Rangitikei District Roads

A report is attached.

File ref: 6-RT-5-23; C1042

Recommendation

That the report 'Forestry Harvest Impact on Rangitikei District Roads' to the Assets/Infrastructure Committee meeting on 9 March 2017 be received.

10 Mangaweka Bridge Update – March 2017

A report is attached.

File ref: 6-RT-1-69

Recommendation

That the report 'Mangaweka Bridge Update – March 2017' to the Assets/Infrastructure Committee meeting on 9 March 2017 be received.

11 Renewal of Marton Wastewater Treatment Plant – Update

A verbal update will be provided at the meeting.

12 Water Safety Plan Statuses – February 2017

A memorandum is attached.

File ref: 6-WS-3-11

Recommendation

That the memorandum 'Water Safety Plan Statuses – February 2017' be received.

13 Including a health and safety dimension within the Council's procurement policy

A memorandum is attached.

File ref: 3-PY-1-7

Recommendation

1 That the memorandum 'Including a health and safety dimension within the Council's procurement policy' be received

2 That the proposed amendments [as further amended /without further amendment] to the Council's procurement policy to include a health and safety dimension be adopted.

14 Update on Progress with Resolving Outstanding Issues with the Water Related Services Bylaw (Parts 2 and 3 public and private drains)

A memorandum is attached.

File ref: 1-DB-1-11

Recommendation

That the memorandum 'Update on Progress with Resolving Outstanding Issues with the Water Related Services Bylaw (Parts 2 and 3 public and private drains)' be received.

15 Resource Consent Compliance – February 2017

A memorandum is attached.

File ref: 5-EX-3-2

Recommendation

That the memorandum 'Consent Compliance – February 2017' be received.

16 PowerCo Presentation – 11.30am

Representatives from PowerCo will make a presentation to the Committee.

17 Late Items

18 Future Items for the Agenda

19 Next Meeting

Thursday 13 April 2017, 9.30am

20 Meeting Closed

Attachment 1

Rangitikei District Council

Assets and Infrastructure Committee Meeting

Minutes – Thursday 9 February 2017 – 9:30 AM

Contents

Present:	Cr Dean McManaway (Chair) Cr Ruth Rainey Cr Nigel Belsham Cr Cath Ash Cr Richard Aslett Cr Jane Dunn Cr Angus Gordon Cr Dean McManaway Cr Soraya Peke-Mason Cr Lynne Sheridan Ms Tracey Hiroa (Te Roopu Ahi Kaa Komiti Representative) His Worship the Mayor, Andy Watson
Also present:	Cr Graeme Platt
In attendance:	Mr Michael Hodder, Community & Regulatory Services Group Manager Mr Glenn Young, Utility Projects Manager Mr Reuben Pokiha, Operations Manager - Roading Mr Brent Holmes, Roading Asset Engineer Mr Andrew van Bussel, Operations Manager - Utilities Ms Gaylene Prince, Community & Leisure Assets Team Leader Ms Philippa Nidd, Compliance Officer Ms Samantha Kett, Governance Administrator
Tabled documents:	**Item 6** **Chair's Report** – Chair's Report **Item 8** **Activity Management** – Activity Management Templates December 2016 and January 2017 & Project Review Report (Wanganui Road Reconstruction)

1 Welcome

The Chair welcomed everyone to the meeting and acknowledged the presence of Ms Tracey Hiroa, as this is her first meeting as the representative for Te Roopu Ahi Kaa.

2 Council Prayer

Cr McManaway read the Council Prayer.

3 Apologies/Leave of Absence

Nil

4 Confirmation of order of business

The Chair informed the Committee that the order of business would be as is in the agenda.

5 Minutes of Previous Meeting

The minutes of the Assets/Infrastructure Committee meeting from 15 September 2016 were briefly discussed. The minutes were attached for information and did not need to be received.

The Committee asked for an update on the proposed works for Broadway in Marton and the meeting that was to be held with local residents regarding the Mangaweka Bridge. An update on the proposed works for Broadway in Marton would be discussed during the item on Activity Management templates.

6 Chair's Report

The Chair spoke briefly to his report.

Resolved minute number **17/AIN/001** **File Ref** 3-CT-13-4

That the Chair's Report to the Assets/Infrastructure Committee meeting on 9 February 2017 be received.

Cr McManaway / Cr Aslett. Carried

7 Strategic Intentions for the 2016-19 Triennium

The Committee briefly discussed the two issues that had been identified for this specific Committee. The following suggested amendments were made to Issue One:

- Uncomfortable with the use of 'declining population'. Would prefer to see changing population or something that brings more positivity. 'Reassess and monitor the Infrastructure needs of smaller communities and the viable options.'

- Changes in population need to be monitored.

The following suggested amendments were made to Issue Three:

- Assess the need for Rural Halls.

8 Activity Management

The Activity Management templates were each discussed individually:

- Roading and footpaths – Mr Pokiha
- Water (including rural water supplies) – Ms Nidd and Mr Young
- Sewage & the treatment and disposal of sewerage – Ms Nidd and Mr Young
- Stormwater drainage – Ms Nidd and Mr Young
- Community and leisure assets (including parks) – Ms Prince
- Rubbish and recycling - Mr Young

The Committee discussed the following points:

Roading

- Several options have been trialled in Taihape to try and improve the slip-hazard on paving stones. Grooving the pavers has brought some improvement, as has water-blasting away the sealant that was placed over them. Investigations will be made into the best way to remove the sealant from all of the pavers in Taihape.
- The recent truck accident on Taihape-Napier Road was not reported in the templates. This was left out in error. The area will be investigated and possible actions to mitigate hazards will be assessed.
- Resurfacing of the footpaths in Turakina will occur this month.

Cr Gordon left the meeting 10.15am and returned at 10.16am

- The unsealed top end of the Turakina Valley Road is getting quite rough and needs to be investigated.
- The curb and channel work that is to be carried out in Broadway, Marton, needs to be worked in with projects from the Utilities team. The roading portion of this project is programmed to be completed in 2017/18. The Committee asked for a timeline for the project so they could fully answer any questions that were directed their way. They also suggested that a regular update be provided to those affected retailers in town so that they are kept up to date with progress on the project.
- The Committee asked that the dump of chip seal at the Pukeokahu Hall be removed before their event in late March 2017.

Utilities

- It has been identified that no formal easement was ever created for the new water-bore in Ratana. Mr Young is working to ratify the situation.
- The installation of the new effluent field at Koitiata has seen Horizons Regional Council give the plant a 'compliant' status.

Cr Wilson left the meeting 10.37am.

- It was suggested that the lines to the properties adjacent to the new water line on Dixon Way/Mangaone Valley Road are too old and cannot handle the pressure and flow of the new line. It was suggested that staff speak to the adjacent land owners about the issue.
- The Bulls mushroom is no longer required for the water supply to the town, but could be kept for historical purposes.
- Optimising works needs to be carried out at the Taihape Wastewater Treatment Plant to allow the clarifier to continue to work during times of low-flow.
- The upgrade of the Ratana Wastewater Treatment Plant would be to the current level of service and additional work may need to be carried out to accommodate the proposed 60-lot subdivision.
- The Committee asked for an update on progress by Horizons Regional Council around the flood mapping for the District.
- Work will continue on Stormwater mitigation in Koitiata.

Community & leisure assets

- Ms Prince gave a progress update on the look-out project for Mt Stewart, Taihape.
- The Committee asked for a timeline on the future of the Taihape Conference Hall. The Taihape Drama Group have expressed an interest in taking over the maintenance of the Hall.

Rubbish & Recycling

- The Committee asked for a report on the costs associated with collecting and disposing of green-waste at the Taihape and Marton Waste Transfer Stations, and whether or not there were any other options that could be considered.

Resolved minute number 17/AIN/002 File Ref

That the activity management templates for December 2016 and January 2017 for Roading, Water (including rural water supplies), Sewerage and the treatment and disposal of sewage, Stormwater drainage, Community and leisure assets, and Rubbish and recycling be received.

Cr Belsham / Cr Peke-Mason. Carried

9 Renewal of Marton Wastewater Treatment Plant – Update

A formal update was not provided to the meeting.

10 Procurement for Upgrade of Taihape Pool – Exemption from open advertising

The Committee did not feel comfortable proceeding with this exemption as they wanted to know why there was only one viable contractor in the country that could complete the works. Further clarification of action would be provided to Council.

11 Review of Fees and Charges for 2017/18

Mr Hodder spoke briefly to the item.

The following amendments were suggested by the Committee:

- Remove the 'Rural Fire Permit' charges (as these are no longer applicable by the District Council).
- Cr Peke-Mason agreed to speak with Mr Hodder around the working of the charges for the Ratana Cemetery.

Resolved minute number **17/AIN/003** **File Ref** 1-AP-2-1

That the memorandum 'Review of Fees and Charges for 2017/18' be received.

Cr Sheridan / Cr Gordon. Carried

12 Resource Consent Compliance – January 2017

Ms Nidd and Mr Young spoke briefly to the report, highlighting to the Committee that the variation to the consent at the Hunterville Wastewater Treatment Plant is progressing with Horizons Regional Council.

Resolved minute number **17/AIN/004** **File Ref** 5-EX-3-2

That the reports 'Consent compliance – December 2016' and 'Consent Compliance – January 2017' to the Assets/Infrastructure Committee meeting on 9 February 2017 be received.

Cr Gordon / Cr Belsham. Carried

13 Late Items

Nil

14 Future Items for the Agenda

Mangaweka Bridge – update and progress

15 Next Meeting

Thursday 9 March 2017, 9.30am

16 Meeting Closed – 11.34am

Confirmed/Chair: _____

Date: _____

Attachment 2

Key priority issue 1 ***Assets/Infrastructure Committee***	**Infrastructure service levels** **Ensuring services meet appropriate standards and are affordable**		
Identified projects • Secure government support for continued reticulated water and wastewater in smaller communities • Understand implications of the One Road Network Classification[1] and plan/advocate accordingly, taking into account the need for a resilient network and opportunities from using local knowledge • Research the merits of a development contributions policy.[2] • Seek a collaborative solution for maintaining roads needed for forestry logging[3] • Reassess infrastructure needs in the District's smaller urban centres Need to reassess where population is increasing and where it is declining (and what implications this has for viable infrastructure) The key wastewater upgrades at Marton, Bulls, Ratana and Koitiata have already been flagged in Council's Long Term Plan/Annual Plan.	**Purpose statement** Council is concerned that the expectations in the community of maintaining present levels of service in the provision of roading, water, wastewater and stormwater services will prove excessive because: • the government's subsidy on local roads is very likely to reduce from 2018 onwards; • the government's (and thus the regional council's) requirements over wastewater disposal will inevitably increase; • more stringent testing of potable water supplies will be required; • there is significant renewal work required in the reticulation networks in all the District's towns; and • the government's preference for CCOs to manage water and wastewater, i.e. at arms lengths from elected members.	**Definition** To ensure that future infrastructure service levels are based on clear assessments of • comparative benefit (i.e. public health and wealth creation); • the contribution to sustainable economic growth; • benefits to significant users of the infrastructure and any additional costs or damage arising from that use; and • realistic options or alternatives to the present level of service.	**Impact of changing population** The existing infrastructure was designed for a larger population than now, but new subdivisions may need greater capacity to provide an acceptable level of service. For example, the planned expansion of wastewater in Ratana[4] and Koitiata will need new infrastructure An ageing population will require more attention to the provision of footpaths which are safe for mobility scooters. There may still be an issue over affordability to replace systems to meet increasingly strict consent requirements. ***FURTHER DISCUSSION*** *What does a development contributions policy mean?* o *reduce additional costs falling on existing ratepayers?* o *disincentive for new developments?* o *costly to draft and consult on?*

[1] This is a congestion-based model which doesn't take count of the value of what is being transported. It won't start until 2018 and a transition period is likely.
[2] If the case is accepted, it will be a proposal for inclusion in the draft 2018/28 Long Term Plan Consultation Document. Proposed changes to the Resource Management Act will remove the opportunity to take financial contributions for new developments: clause 155, Resource Legislation Amendment Bill would repeal section 111 of the RMA.
[3] The outcome of work by a national representative body is expected by 31 March 2017. Some councils have already addressed the issue, e.g. Ruapehu, as foreshadowed in its 2015/25 Long Term Plan, with its 50% loading (on the roading rate) on land being used for commercial forestry from 2016/17. This is projected to yield an additional $167,000. Council's Roading team has arranged for a study from Moore & Associates. .
[4] A capital provision of $1.2 million was made for the expanded, upgraded treatment plant at Ratana in 2016/17 (to be carried-forward into 2017/18); a one-off contribution is sought from Te Puni Kokiri for this, comparable to what has been done in other, similar places. The infrastructure within the new subdivision at Ratana is part of the development, for which Council funding is not required.

Key priority issue 3	Future-looking community facilities[12]		
Assets/Infrastructure Committee	**Ensuring community facilities are future-fit and appropriately managed**		
Identified projects	**Purpose statement**	**Definition**	**Impact on changing population**
• Gain clarity over funding and management of pools • Future arrangement for groups in former Taihape College • Facility upgrades in Bulls Domain, Marton Park and Taihape Memorial Park[13] • Reassess the need for each rural halls and dispose of those which are not used[14] • Determine the long-term approach for provision of community housing (and the extent to which Council might build new housing) • Tackle new opportunities – e.g. o Better access to the Rangitikei River o Cycleway Bulls to Kakariki o Paddleway on the Rangitikei o Public access to Marton B and C Dams o Skatepark in Marton o Public toilet in Mangaweka o Santoft Domain – restore public space • Toilets in more remote recreational areas (potential[15]	Council is concerned that there are too many under-used community facilities and that the pace of rationalisation must accelerate to • reflect what the community wants; • provide facilities which will be useful in the coming decades; • secure viable alternative management or ownership arrangements; and • find alternative uses (or demolish) surplus facilities to avoid the spectre of poorly maintained and vandalised buildings. Council also want to look at what amenities could be developed, in the interests of local residents as well as attracting visitors.	To ensure that there is a process agreed with the community to evaluate and give effect to the realistic future of: • towns and rural halls, • community housing, • park facilities, • pools, • libraries, and • public toilets. It would be feasible to prioritise this work on the basis on Council's current investment in these categories. However, communities may prefer a whole-of-town approach. This is potentially the most contentious issue for Council to provide leadership – in part because of community unwillingness to see old facilities disappear, in part because of division within any community about the nature and design of new facilities.	Population change is one factor in rethinking what will be useful community facilities. Even more important is the changing needs of the community, already evident in reduced use of halls and new uses within libraries. The adaptability of the community needed to be appreciated – cf. the use of the former Taihape College. In general, however, people don't like using run-down facilities. One tension evident in Marton is the pressure on pre-school places, but there was a consensus that it was not Council's role to help address that. ***FURTHER DISCUSSION*** *District toilet strategy.* *Council as 'honest broker' in providing facts about housing developments, aged care etc.*

[12] This issue had previously been titles 'Unused facilities/rationalisation'. The November 2016 discussion was more focussed on new opportunities, without dismissing the need to deal with outmoded, run-down and little used facilities. A strong linkage with economic development.
[13] This includes a decision on the location of the new amenity block and the future of the grandstand.
[14] One impediment, ironically, is the generosity of the Dudding Trust to fund renewal work in these halls.
[15] Freedom camping is not yet a significant issue in the Rangitīkei. But there are instances, e.g. at Simpson's Bush (DoC) and Queens Park in Hunterville.

Attachment 3

ROADING AND FOOTPATHS GROUP OF ACTIVITIES 2016/17

Feb-17

Major programmes of work outlined in the LTP/Annual Plan 2016/17

Pavement Rehabilitation	Route Position Length	Status	Start date	Completion date	Planned for the next two months
Wanganui Road	0-544		Jan-16	Nov-16	
		Report on the Wanganui Road Project. This project is now completed.			
Marton - Bond Street/Skerman Street (94m)		Completed	Feb-17	Feb-17	
Marton - Wanganui Road/Skerman Street (70m)		Completed	Dec-16	Dec-16	
Franklin Road (580m)		Completed	Jul-16	Jan-17	
Okirae Road (338m)		Completed	Nov-16	Dec-16	
Paraewanui Road (1,403m)		Under investigation.	Feb-17	May-17	Investigations and design continuing
Taihape-Napier Road (880m)		Under Construction.	Jan-17	Mar-17	
Te Moehau Road (450m)		Completed	Nov-16	Dec-16	
Turakina Valley Road (721m)		Under investigation/design.	Feb-17	Apr-17	Investigations and design continuing
Griffins Road (920m)		Completed.	Sep-16	Dec-16	
Sealed Road Resurfacing (over 200m)	Route Position Length	Status	Start date	Completion date	Planned for the next two months
Broadway (Marton)					Continue with resurfacing programme.
Daniell Street					At end of Feb approx 54% (30.9 kms) for Feb
Goldings Line					completed.
Kauangaroa Road					
Koeke Road			Feb-17	Feb-17	
Leedstown Road			Feb-17	Feb-17	
McHardies Road					
Makirikiri Road					
Mangahoe Road			Feb-17	Feb-17	
Matawhero Road			Feb-17	Feb-17	
Mellingon Road			Feb-17	Feb-17	
Mill Street (Marton)					
Moa Street			Feb-17	Feb-17	
Mt Curl Road					
Neumans Line					
Oaklea Avenue					
Otuarei Road			Feb-17	Feb-17	
Potaka Road					
Putorino Road					
Rangatira Road					
Ross Street					
Ruanui Road			Feb-17	Feb-17	
Stantialls Road					
Tennent Court					
Turakina Beach Road					
Turakina Valley Road			Feb-17	Feb-17	
Tutaenui Road					
Union Line					
Waiaruhe Road			Feb-17	Feb-17	
Wanganui Road					
Wellington Road					
Capex report 2016/17	cumulative to 30/09/2016	cumulative to 31/12/2016	cumulative to 30/3/2017	cumulative to 30/6/2017	Budget
Sealed road surfacing:	1%	124,038			2,390,746
Drainage Renewals	21%	320,311			500,000
Pavement rehabilitation	2%	922,194			1,770,000
Structures component replacement	7%	291,009			316,993
Traffic services renewal	63%	149,492			224,900
Associated improvements	1%				25,000
Unsealed road metalling	33%	311,973			460,125
TOTAL					5,687,764
Streetlight renewals	Design/ Scoping	Tender/Contract docs	Under construction	Complete	Planned for the next two months
The proposed LED streetlight replacement program will initially target areas in Marton as there are several large streetlight circuits which intermittently suffer from outages due to overloading. Installation of LED's will reduce the connected load and alleviate these issues. Once this stage of the program is completed it is anticipated that the program will continue through to 2018 in other areas of the district as current renewal budgets allow. In 2018 progress will be re-assessed and and any additional that is required may be sought through the 2018 – 2021 NZTA funding cycle			Approx 85% of the LED'S have been installed in the Marton Urban area.		Complete the upgrade to LED's

Footpath Renewals	Design/ Scoping	Tender/Contract docs	Under construction	Complete	Contractor
Taihape: Robin Street	Design - 100% complete (length 70m)	Contract 1007		Being reconsidered due to funding.	Crimpy's
Marton: Lower High Street	Design - 100% complete (length 30m)	Contract 1008	completed	Completed May	Loader's
Taihape: Hautapu Street	Design - 100% complete (length 73m)	Contract 1007	completed	Completed Sept.	Crimpy's
Taihape: Hawk Street	Design - 100% complete (length 25m)	Contract 1007	completed	Completed Sept.	Crimpy's
Taihape: Kaka Road	Design - 100% complete (length 160m)	Contract 1007.	completed	Completed Oct.	Crimpy's
Monitor upgrades of footpaths in Turakina including the laying of chipseal					
New Footpaths	Design/ Scoping	Tender/Contract docs	Under construction	Complete	Contactor
Bulls: Hammond Street	Design - 100% complete (length 190m)	Contract 1008	completed	Completed May	Loader's
Ratana: Taihauauru Street	Design - 100% complete (length 76m)	Contract 1008	completed	Completed May	Loader's
Ratana: Tairawhiti Street	Design - 100% complete (length 100m)	Contract 1008	completed	Completed May	Loader's
Ratana: Rangatahi Road	Design - 100% complete (length 75m)	Contract 1008	completed	Completed May	Loader's
Footpath Programme for 16/17.	The footpath programme for the 16/17 year is on hold due to lack of funding.				
Bulls: 136-160 High Street (investigate costs only)					
Taihape: SH1 to Dixon Way (investigate costs only)	This particular project is a major one running from the town to Dixon way heading south and potentially will traverse along the SH. Discussions have been held with NZTA who are not receptive in giving approval.				
Ratana: Te Taitokerau and Seamer Streets (investigate costs only)	$42,000 Te Taitokerau length approx 230m - 1.4wide -10 driveways. Seamer street was identified to have a footpath on the opposite side of the street, but the recommendation is not to as a lot of parking of buses takes place along here. This matter will be brought to Council's meeting on 3 November 2016 for consideration.				
Minor safety improvements	Design/ Scoping	Tender/Contract docs	Under construction	Complete	Planned for the next two months
Orchard Road	Design completed	Roading contract	Under construction	Completed	
Turakina Valley 3 - widening Majuba Bluff RP 9450-9660 (in conjunction with flood damage repair work)	Design completed.	Tender closed. Approval to proceed given by Council 1/12/16. $400k EW, $300 MI, and 15k drainage.	Jan-17		Continuing with construction of project.
Parewanui Road seal widening	This site is currently under investigation.	Roading Contract			Continuing with Investigation and design.
Other major programmes of work carried out during 2016/17					
Projects	Design/ Scoping	Tender/Contract docs	Under construction	Complete	Planned for the next two months
Makirkiri Road seal widening RP 8500-8820 (in conjunction with new milk tanker entranceway @ McCarthy's)	Second coat seal in conjunction with reseal programme planned for 16/17	Roading contract.			Second coat seal stil to be applied.
Note At Ratana, Two sets of speed humps have been constructed with a third in Rangitahi Street about to be placed. Barriers and bollards have been placed on the grass verges to stop people by passing the speed humps.				Third speed hump has now been placed.	

WATER SUPPLY GROUP OF ACTIVITIES 2016/17

Feb-17

Major programmes of work outlined in the LTP/Annual Plan 2016/17

Projects	Design/ Scoping	Tender/Contract docs	Under construction	Complete
Marton: WTP Seismic assessment of Clarifier & strengthening ($300k)	Detailed seismic investigation underway.	EOI invited, tender awarded to Calibre	Investigation only	
Marton: Complete replacement of line from Calico Line bore and commence design for replacement of Tutaenui Road falling main from Jeffersons Line to Town ($748k 2017/18)	Renew existing 100 mm AC water main down Calico Line towards Nga Tawa School. Upsize to 150 mm to provide fire flows. Broadway water main renewal will now take place in 2016-2017, this budget will be used for that project instead, and Calico Line will instead take place in 2019-2020 as per the Long Term Plan.	Broadway watermain designed and being prepared for tender.		
Taihape: Water Treatment Plant structural renewals and various reticulation renewals including design and preparation work for renewals of 1.2km of trunk main ($1.91M 2017/18)	Reservoir deemed earthquake prone requiring $200-$300k of earthquake strengthening. Reservoir is also in need of new roof supporting structure. Investigate option of a new reservoir to replace existing and report by 30 September 2016. Work may be required over two years.	Design should be completed mid February.		
Taihape: Reticulation upgrade for Dixon Way and Mangaone Valley Road ($104k)	Investigation followed by capital works; level of upgrade to be determined; investigate Rauma Rd school connection; need to report back to Council on options i.e. on demand, trickle feed, complete ring main. Replacement of small diameter mains with 50mm NB mains (JS). Brief already issued for investigation.			Complete
Bulls: Renewals to reservoirs and lift pumps. Improved treatment storage, filtration, backwash and river pump station ($757k)	New reservoir at Trickers, seismic strengthening of Concrete building and filter at Bridge St (est. $100-$200k) and possible strengthening of mushroom at Bulls. New reservoir to be minimum 900m³, preferably 1200m³, with new access track on legal title. Seismic assessment of mushroom indicates $300-$400k of strengthening work required. Money available will depend on cost of new reservoir and a requirement for the mushroom to remain as a feature of Bulls. Annual Plan budget - renewals to reservoirs and lift pumps ($757,000 plus $633,000 carry over for seismic strengthening). Note that costs may include some rising main improvements (replace 2.4 km rising main off Flower Street along alternative route Taumaihi, Kittyhawk, High	Investigation underway, in discussions with landowner for reservoir, Access and easements required. Seismic analysis will be handled as part of larger contract.		
Mangaweka: WTP Structural improvements to reservoir, river pump station, renewal of mains in Weka Street, Mangawhararikl Road and Broadway ($820k)	Seismic assessment shows reservoir needs approx $200-$300k of strengthening. Investigate options for a new reservoir with an increased height and size. Investigate condition of river pump station and intake structures to enable renewal of consent for abstraction.	EOI invited, tender awarded to Calibre		
Hunterville: Treatment and reticulation upgrades (rural & urban schemes), Erewhon and Omatane rural schemes ($475k)	Operations carrying out initial investigation & prioritisation	Works underway		

Major projects Carry-forwards 2015/16				
Projects	Design/ Scoping	Tender/Contract docs	Under construction	Complete
Marton: Broadway duplication ($140k)	Programme was for 2015-2016 ahead of major Roading work; approx. 460 m between High St and Signal St; duplicate existing 150 mm AC on east side with new 150 mm on west side. Design only and defer to year 6 or later to align with replacement of AC main. We will now instead renew the main in the Follett to Signal block, upsizing from 150 mm to 200 mm.	Design only -underway		
Taihape: WTP Structural repairs as a result of seismic assessment ($129k)	Reservoir deemed earthquake prone requiring $200-$300k of earthquake strengthening. Reservoir is also in need of new roof supporting structure. Investigate option of a new reservoir to replace existing and report by 30 September 2016. Work may be required over two years.	EOI invited, tender awarded to Calibre		
Taihape: Complete installation of lamella clarifier ($70k)	Complete installation of lamella plate clarifier; will need pad for it to sit on and reinstatement of ladders and handrails. Allow $50k for removal of old clarifier, $20k for I&E.	Design complete, tender awarded to Andrew Morriss Construction	Foundation works underway, encountered design issues and proposed location of pad. Working through options with consultant.	
Taihape: Reticulation upgrade for Dixon Way & Mangaone Valley Road ($70k)	Investigation followed by capital works; level of upgrade to be determined; investigate Rauma Rd school connection; need to report back to Council on options i.e. on demand, trickle feed, complete ring main. Replacement of small diameter mains with 50mm NB mains (JS). Brief already issued for investigation. Design complete, Tender issued, closes			
Bulls: Design and construction of new reservoir as a result of seismic assessment ($633k)	In conjunction with above.	Design underway and looking through options for access track and proposed tank.		
Mangaweka: Structural repairs as a result of seismic assessment ($80k)	In conjunction with above.			
Ratana; water supply upgrade - new reservoir, bore and treatment system. (Est $1.6M)	Water treatment system under design	Water treatment building Tender awarded to Kiwispan Ltd. (est$130k) Water treatment processing awarded to Filtec. (est $630k). Application made to Ministry for extension of time to complete works June 2016. Approved.	Building works programmed Dec 2015 Treatment works programmed Jan 2016 Reservoir & Network Connections TBC. Meeting with Dairylands & Ricky Taiaroa, land ownership issues resolved. Meeting with Ratana Waipu Trust Feb 14 to sign lease. Survey plan to be prepared to give effect to lease. Site access to be upgraded. Building Consent application made. Building works almost completed, power has been installed to site, Filtec and Loaders have started filtration works and underground pipes respectively. Works should be completed mid to late April.	Water reticulation network completed. Reservoir completed. Bore installation completed. Land Entry (easement) no loner required as power supply will be running through road reserve. Kiwi Span have completed the installation of the treatment plant building apart from minor fixings and have handed building across to Filtec. Filtec has begun installation of plant process equipment. Commissioning of treatment plant Mid to late April 2017.

SEWERAGE AND THE TREATMENT AND DISPOSAL OF SEWAGE GROUP OF ACTIVITIES 2016/17

Feb-17

Major programmes of work outlined in the LTP/Annual Plan 2016/17

Projects	Design/ Scoping	Tender/Contract docs	Under construction	Complete
Bulls: WWTP Aeration improvements and installation of infiltration galleries	Dependent on Consent renewal - consent lodged 2015			
Marton: WTP Upgrades or changes to treatment system to improve effluent quality, solids removal etc.	Refer to Marton WWTP monthly report - most work on hold pending results of treatment at landfill.			
Marton: WWTP Anaerobic pond desludging	Desludging of pond on hold until leachate from landfill is no longer discharged to Marton.			
Taihape: Improvements to reticulation, particularly sewer main renewals in Linnet Street and Paradise Terrace ($304k)	Design underway. 21-33 Linnet St Sewer and 7-8 Linnet St Sewer have been assessed as being in Condition 5 (Very Poor) and requires either re-lining or spot repairs. This is a 98 m length of 150 mm diameter earthenware gravity main. 12-15 Paradise Tce Sewer and 30 Paradise Tce Sewer have been assessed as being in Condition 5 (Very Poor) and requires either re-lining or spot repairs. This is a 46 m length of 150 mm diameter earthenware gravity main.	Under design		
Taihape: WWTP Improvements at treatment plant including clarifier to protect membrane filters ($301k)	Complete installation of lamella plate clarifier. Joint Project with WTP Clarifier.		Lamella clarifier in place and connected, treatment process being optimised.	Complete
Hunterville Sewer renewals	Sewers for renewal being surveyed ready for lining.	Under design		
Ratana: Upgraded treatment plant and reticulation ($1.9M)	Additional treatment processes needed to treat ammonia and DRP. To be investigated. Operations to investigate and report on options.	On hold pending consent		
Koitiata: Upgraded reticulation (subject to consultation) ($119k)	Operations/assets completing investigation works	Septic disposal field installed.	Further work subject to community consultation.	

Other major programmes of work carried out during 2016/17

Projects	Design/ Scoping	Tender/Contract docs	Under construction	Complete
Marton WWTP - essential renewals prior to full assessment and drafting of consent application ($302k)	Works needed to assist with Consent renewal (subject to successful treatment of leachate and advice from Advisory Group) to prepare for consent renewal in 2018. Sucker truck dump site required, to be installed before Christmas.	1) Assets team is responsible for consent. 2) Design of road is completed and will be started after Christmas.		
Hunterville WWTP - desludging ($80k)	Sludge removed from forebays in 2015/16 year. Remaining sludge to be removed from amongst reeds weather permitting.	Sludge removal currently programmed for January/February		

STORMWATER GROUP OF ACTIVITIES 2016/17

Feb-17

Major programmes of work outlined in the LTP/Annual Plan 2016/17

Projects	Design/ Scoping	Tender/Contract docs	Under construction	Complete
Marton: Hammond Street Stormwater Renewal	Historic flooding at rugby grounds etc.; design work carried over to 2014-2015. Stage 1 of construction, from the Tutaenui Stream to Hair St, was programmed for 2015-2016. Stage 2 follows, from Hair St to the roundabout at the intersection with Broadway. Work must be completed ASAP in 2016-2017 so that Roading can hotmix in the vicinity of the roundabout. Refer to existing brief for further details. Retic network under investigation and design. (est $225k)	Contract awarded to Blackley Construction 30/4/16	Works programmed to commence late May. Construction Works commenced. Outlet to Tutaenui Stream on hold pending "dry" conditions in accordance with resource consent conditions.	Outlet design complete. Discharge consent granted from Horizons. Stg1 works completed.
Marton: Pukepapa Road Stormwater renewal	Replacement of steel mains from Wilson Pl to Pukepapa Rd.	Design underway		
Marton: Harris Street Stormwater renewal	Section of Armco culvert in poor condition being investigated with a view to lining or replacement.	Design underway		
Marton: Wanganui Road Stormwater renewal				Work completed in 2015-16
Upgraded culverts, drains and inlet protection - Taihape, Mangaweka, Hunterville and Bulls	Various minor inlet improvements underway in Taihape, Mangaweka, Hunterville and Bulls.	Taihape stormwater outfall improvements - 900mm pipe behind swimming pool - fence to be placed around outfall structure to secure site		
Upgrades to mitigate future flooding in Marton and Bulls	Hot spots investigation and design mitigation underway.	Most projects on hold pending modelling information from Horizons on Tutaenui water levels.	Skerman and Milne St price accepted and programmed for construction in December.	
Taihape: Paradise Terrace Stormwater renewal	Gravity main to be replaced.	Design underway		

Other major programmes of work carried out during 2016/17

Projects	Design/ Scoping	Tender/Contract docs	Under construction	Complete

COMMUNITY AND LEISURE ASSETS GROUP OF ACTIVITIES 2016/17

Feb-17

Major programmes of work outlined in the LTP/Annual Plan 2016/17

Parks and Open Spaces	Design/ Scoping	Progress to date	Progress for this period	Planned for the next two months
Turf Regeneration in Parks		Centennial Park irrigation installation, and turf renovation was carried out in August. Taihape Irrigation project is complete.		Fertiliser will be spread on Memorial (Taihape), Centennial (Marton), and Marton Parks, and Hunterville and Bulls Domain sportsfields in April.
Tree Management in Parks		Tree management was carried out in Queens Park, Hunterville, and at Marton Park, along Follett Street. Trees in Broadway, Marton, were reduced. Remedial work was required on some trees at Centennial Park, Marton, following high winds.	Finalising the first draft of the Urban Forest Plan.	
Establish Wasp Control Programme		Training undertaken for two members of the Parks & Reserves team to become approved handlers. Taihape Area School and Ministry of Heath notified of intention to carry out this work. Environmental assessment and Iwi consultation carried out as part of the DoC required process to conduct this programme.	Wasp numbers are being monitored but are very low to date.	
Parks Upgrade Partnership	$12,177.22 available. $6,000 is tagged for a gas BBQ at Sir James Wilson Park, Marton. $14,226.00 has been tagged for Friends of Mt Stewart for a new lookout tower.			
Community Buildings	**Design/ Scoping**	**Progress to date**	**Progress for this period**	**Planned for the next two months**
Complete Multi-purpose Facility in Bulls - dispose of surplus sites and re-develop Library site	Draft preliminary estimate has been received for the new multi-purpose facility in Bulls. Public meeting held 8 August, with an opportunity to provide feedback in the following week. The present Bulls Information Centre site is the only property that has no constraints affecting disposal of the site. Legal advice is being sought on other properties identified for disposal in Bulls.		Value Management workshop was held to identify areas where costs could be reduced e.g. substitution of materials. A funding application has been submitted to Four Regions.	Consultation on the altered funding model and the sale of surplus plan as part of the 2017/18 Annual Plan process.
Re-Roof Marton Plunket Rooms				Re-assessment will be carried out.
Renovations at Rural Halls	Work programmes identified;	Kitchen renovation, and preparation & painting of windows has been completed at Mataroa Hall; Heat pumps were installed at Tutaenui Hall; Weather-proofing, painting, and structural repairs undertaken at Ohutu Hall and Rifle Range.Vinyl was installed at Koitiata Hall and exterior of hall was painted. Liaison with Taoroa and Whangehu Hall Committees re projects on their halls.	90% of re-roofing project at Mangaweka Hall has been completed. Floors were stained at Mataroa Hall.	Interior renovations (painting, staining and building repairs) will be carried out at Taoroa Hall.
Re-paint Marton Memorial Hall		Painting specification completed.	Documentation for painting of Marton Memorial Hall has been placed on Tenderlink.	Painting to be completed by end of May.
Demolish Conference Hall in Taihape		TCB recommended resolved that they do not support the demolition of this hall. Taihape Drama Group have verbally expressed interest in occupying/maintaining this building.		Taihape Drama Club to have met and either submitted a written expression of interest, or withdrawn their verbal expression of interest.
Construct new Amenity Block on Taihape Memorial Park				Site to be identified as part of 2017/18 Annual Plan consultation.
Re-paint Jubilee Pavilion at Marton Park	Preliminary work underway - estimate obtained, specification to be finalised. Awaiting confirmation of Heritage colours for paintwork.			Minor maintenance will be carried out prior to painting.

Re-paint Hunterville Grandstand	Preliminary work underway - estimate obtained, specification to be finalised	Item was discussed at HCC and a meeting was held with identified working group.	Final paint colours confirmed at end of February.	Minor maintenance to be conducted.
Replace Ablution Block Roof at Dudding Lake			This work has been completed.	
Swimming Pools	Design/ Scoping	Progress to date	Progress for this period	Planned for the next two months
Fit Solar-Heating at Marton Swim Centre				
Chemical Shed at Marton Swim Centre	Order has been issued for this work.	Building Consent has been lodged. Building team have sought clarification from Builder on various items.	Building Consent was issued.	On-site work to commence.
Filtration & Heating at Taihape Swim Centre	Estimated costs are in the vicinity of $446,000 for the following works: a required upgrade to the main power switchboard, upgrading of lighting to meet the Code, new heat pumps for all pools, a new plant room, separate chlorine systems for all pools, upgrading the DE backwash system, and upgrading treatment and filtration for the toddlers, and learners pools. This cost does not include any building code requirements that may arise as a result of a building consent being applied for, or for upgrading the filtration to the main pool. The filtration for the main pool is considered adequate, although it does not meet NZS 4441, which is not a mandatory standard. TCDT has committed $100,000 towards. This leaves a shortfall of $200,000.			Specification will be prepared. Decision for Council to fund the upgrade using reserves, or defer the upgrade until the funding gap is covered by sources other than Council is being consulted on as part of the 2017/18 Annual Plan process.
Install Space-Heating at Taihape Swim Centre				
Community Housing	Design/ Scoping	Progress to date	Progress for this period	Planned for the next two months
Community Housing Management and Upgrades	The incoming Council to consider this item.		Presentation by Manawatu Community Trust to February Council meeting. 100% tenancy obtained (last vacant unit is in the process of being painted prior to tenant shifting in.)	Discussion to be had with Council regarding the presentation from Manawatu Community Trust, and whether to continue investigating options for alternative management of community housing.
Property	Design/ Scoping	Progress to date	Progress for this period	Planned for the next two months
Purchase Cobbler/Davenport/Abraham & Williams Properties as site for Council's Administration and Library Services, and undertake initial Heritage and Development Concept		Purchase of this property has been finalised. Opus was engaged to prepare a heritage assessment and concept development design. They undertook preliminary site investigations in mid-November.		Consultation on the extent of the present buildings to be preserved is being consultated on as part of the 2017/18 Annual Plan process.
Other major programmes of work carried out during 2016/17				
Projects	Design/ Scoping	Progress to date	Progress for this period	Planned for the next two months
Contribute to Multi-Purpose Turf Facility in Marton				
Mangaweka Camp Ground Ablution Block	Version II Concept plans have been received from the architect. Architect held discussions with Infrastructure staff. Architect has met with Council's planner and building officer.	Resource consent application is being prepared (the land is within the Outstanding Landscapes and Natural Features area, and the proposed building is larger than the current one, and in a different location).	Independent assessment with regard for the need for a resource consent was submitted to Council.	Appropriate consents will be issued.
Painting of Marton Library		Painting and signwriting completed. Discussion has been held with Julie Oliver regarding options for painting the mural on a medium that will allow it to be relocated at a future date.		This will be re-addressed in April.
Hunterville Cemetery Roadway		Order has been issued for this work.		Stage I of the upgrade will be completed during summer of 2016/17.

RUBBISH AND RECYCLING GROUP OF ACTIVITIES 2016/17			Feb-17
Major programmes of work outlined in the LTP/Annual Plan			
What are they:	Targets	Progress to date	Work planned for next three months
Waste management	Bulls Waste Transfer Station - trial recycle shop	Container on site. Safety fencing needs scoping first.	Erect safety fencing at Bulls WTS.
	Marton Waste Transfer Station - trial recycle shop	Container on site.	Drop off arrangements need finalising with contractor- SEL.
Waste minimisation	Waste Education NZ visits.	Marton, Makirikiri, Turakina, Taoroa, Papanui, Bulls received Zero Waste Education module.	Not yet known. Acceptance of programme by schools is voluntary.
	Horizons Enviroschools programme.	Green day held at Bulls School in July. Cluster workshop in September -Water conservation. Held at South Makirikiri School. Visit to Marton Childcare. Visit to Pukeokahu	Visit all schools who have embraced the Enviroschools programme.(12 month plan).
Other projects			
What they are:	Targets:	Progress to Date	Work planned for next three months
Scope of review of the Waste Management and Minimisation Plan	Review of WMMP	Data collated.	No work planned for the next three months, review due in 2018.
Review of options for the continuing operation of the Marton Waste Transfer Station	Investigate the land value of site	Ross Mc Neil enquiry to LIMS.	Parks and Property Department in association with R McNeil to investigate this further.

Attachment 4

Report

Subject:	**Forestry Harvest Impact On Rangitikei District Roads**
To:	Assets/Infrastructure Committee
From:	John Jones, Asset Manager – Roading
Date:	3 March 2017
File:	5-RT-5-23; C1042

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1 Purpose

1.1 The purpose of this report is to advise Council of the likely forestry harvest dates and the impact it will have on the District's Roading Network.

2 Executive Summary

2.1 Within the Rangitikei District, forest establishment trends peaked in the early 1990s and have fluctuated since then. Due to these phases of large scale forest establishment, forest harvest schedules will coincide, changing road usage patterns and placing pressure on rural road maintenance schedules. The size and remote locations of some major forest lots will require road maintenance and harvest regimes that maintain both public use and harvest sustainability.

3 Background

3.1 In the Rangitikei District large scale forest establishment will increase future heavy traffic activity on rural roads. This activity will be spread over a number of years however, usage patterns will be non-linear as forest harvest schedules, log prices, harvest mechanisms and forest ownership dictate harvest patterns.

3.2 High volumes of harvestable timber will reach maturity in the period 2020-2030 with over 50 % of the regions 20,100ha becoming available for logging. On average the region produces around 530 tonne/ha harvested yield.

3.3 The regions two key forest epicentres Santoft and Hunterville are different by nature. While producing less tonnage per ha due to its poorer soils types Santoft is predominantly a 'mixed age class' forest resource, with established road access, road egress points, low relief land and with close proximity to State highways.

3.4 In comparison the Hunterville area is remote, has large areas of even age class forest, egress points for harvested timber are not yet established for the majority of large forest blocks, timber yield (tonnes/ha) is higher and land is higher relief (steeper).

3.5 Most importantly roads servicing the Hunterville forest area and linking them to State Highways are often unsealed low volume rural roads.

3.6 Consultation with major forest owners is required to determine key egress points prior to harvest operations. This information will feed into road maintenance schedules, engineering and design.

4 Discussion and Options considered

4.1 **Safety Considerations:** Pre-emption of factors influencing road usage quality during peak harvest periods will rely on proactive road maintenance schedules and effective communication between roading engineers, forest managers and public users.

- Public traffic volume, potential traffic interactions, visibility, average speed on carriageway and communication are key determinants of accident causation.
- Road users need to be aware of forest operations and understand daily and weekly traffic flows to minimise accident potential.
- Public meetings/notices, heavy traffic signage, laybys, km markers, vision benching, driveway mirrors and in some cases radio communication are all effective means of minimising accident potential.

4.2 **Road maintenance schedules:**

- Base course development will need to allow for appropriate consolidation periods prior to increased forest traffic volume.
- Base course development should allow for seasonal models in harvesting, harvest volumes and also severe weather events.
- Carriageway width needs to allow for appropriate visibility, speed limits, passing areas and overhead obstructions.
- Perimeter road fencing should also be assessed as a factor influencing potential low volume road width.
- Road gradient (especially on tight uphill corners) should be considered in maintenance schedules to minimise base course degradation.
- Culverts and road drainage systems need to be of a grade and quality to withstand increased weight loading, and potentially increased sediment flow from forest operations and severe weather events. The interplay between severe weather and poorly maintained culverts can be crucial in sustainable road use.
- Entry and exit angles from corners, bridges and egress points needs to be considered and allow appropriate distance for heavy traffic entry set up.
- Vision benching should be considered on blind corners and egress points to minimise accident potential.
- Forest managers and roading engineers need to discuss mechanisms for harvest machinery accessibility e.g. haulers. Potential exists for this to be a major limiting factor in the ability to harvest and harvest periods.

5 Operational Implications

5.1 The data has shown some clear trends in harvestable age timber.

- 34% of total district harvestable tonnage occurs in the 2027-2029 period.
- 50% of total district harvestable tonnage occurs in the 2027-2032 period.
- A number of large even age woodlots will mature in the 2024-2032 period in the Hunterville forest epicentre.
- As an example, in the 2027-2029 period 50% of district tonnage occurs on 3
- roads within the Hunterville forest area. These include:

    - Turakina Valley Road
    - West Road
    - Watershed Road.

5.2 The Santoft forest epicentre shows a more mixed spread of age classes and smaller lot size.

5.3 These results show a clear trend towards peak harvesting periods, age classes, forest locations and potential road usage scenarios.

5.4 The District does not have an equal spread of forest areas. Certain land types have suited the establishment of larger forest areas and in doing so have established two major district forest epicentres at Hunterville and Santoft.

6 Financial implications

6.1 An assessment needs to be carried out on the rural pavement maintenance requirements as a consequence of forestry activities. This body of work would provide an indication of the additional costs over and above the current forward works programme.

6.2 Assessing impacts on the Forward Works Programme involves a comparison of the nature and timing of roadworks required with and without the extra heavy vehicle traffic, based on predicted axle loadings. Forecasting required pavement works requires a sound knowledge of the issues involved, solid data and good professional judgement.

6.3 A similar assessment carried out by Whanganui District Council revealed that there is very little difference between preventative maintenance and reactive maintenance costs. Both of these, however, were estimated to be $20M over/above their current forward works programmed funding levels of the next 25 years.

6.4 The additional costs will need to be budgeted for. New Zealand Transport Agency (NZTA) financially assists the road maintenance budget (currently 63%), but will require strong and evidentiary data to be persuaded to fund these effects over and above the current funding provisions.

6.5 A pavement impact assessment should be carried out to consider the surface condition and structural capacity of the pavement, and the effect on the forward works programme, and associated costs.

7 Statutory Requirements

7.1 Council has statutory obligations under the Land Transport Management Act 2003 to maintain a roading network within the District. An effective roading network is also essential to ensuring economic and social wellbeing of the community through the provision of access and mobility for people, goods and services.

8 Delegations

8.1 Council has delegated authority to the Asset and Infrastructure Committee to receive this report.

9 Consultation

9.1 Consultation with major forest owners (>100ha) should be undertaken to determine forest harvest egress points onto rural roads more accurately. This data should be mapped using suitable GIS methods to locate areas that represent harvest 'hot-spots' and infrastructure bottlenecks e.g. bridge weight loadings, passing width and turning radius issues.

9.2 Meetings should be held with major forest owners to discuss suitable methods of cooperative harvest schedules and infrastructure e.g. shared egress points, harvest plans.

9.3 The feasibility of establishing facilitate new railheads should be discussed with Kiwirail, the forestry industry, and NZTA.

10 Cultural Considerations

10.1 There are no cultural considerations to be taken into account.

11 Conclusion

11.1 An increase in afforestation occurred during the early to mid-1990s. The expected log yields per road have been quantified from which maintenance schedules for high volume roads in the region can be derived and prioritised.

11.2 Road usage and egress point forecasts identify both high volume periods and harvest areas. Key wood availability periods exist between 2020 and 2032, these include harvest groups in the 2024-2026, 2027-2029 and 2030-2032 periods when over 50 percent of the region's forests reach harvestable age.

11.3 High volume areas which impact on low-volume roads are located on central and western roads and carry a large percentage of regional volume. A relationship exists on these roads between distance from State Highway, large average lot size and even-age plantations. This relationship has implications for road maintenance schedules.

11.4 Variable log grade and wood product demand, carbon trading, local mill viability and forest infrastructure (machinery & skilled staff) are all major factors influencing future forest harvest, re-establishment and harvest timeframes.

11.5 Roading maintenance programmes should assess major harvest timeframes, areas and manage road maintenance schedules accordingly. These schedules should include public and forest manager communication, base course and associated road technical considerations including culverting and drainage.

11.6 Railheads are becoming an integral part of the forestry transport network, particularly as a means of easing congestion on State Highways. Opportunity exists at places like Hunterville to create hubs which may result in some realignment of feeder networks.

12 Attachments

12.1 Moore and Associates (February 2017) Wood availability and related roading implications on Rangitikei District roads 2018-2047. A forestry study prepared for Rangitikei District Council.

13 Significance of Decision

13.1 The Council's Significance and Engagement policy is not triggered by matters discussed in this report.

14 Recommendations

14.1 That the report 'Forestry Harvest Impact on Rangitikei District Roads' to the Assets/Infrastructure Committee meeting on 9 March 2017 be received.

John Jones
Asset Manager, Roading

Appendix 1

Moore + Associates

Wood availability and related roading implications on Rangitikei District roads 2018-2047

A forecast study prepared for the Rangitikei District Council

Moore and Associates

February 2017

Moore + Associates

Contents

List of tables and figures

Introduction

This study investigates forecast trends in forestry-related heavy traffic activity on Rangitikei District roads. The following report explains forestry data used to calculate regional harvest forecasts, the results of this data and also forecast figures on future harvest activity on district roads.

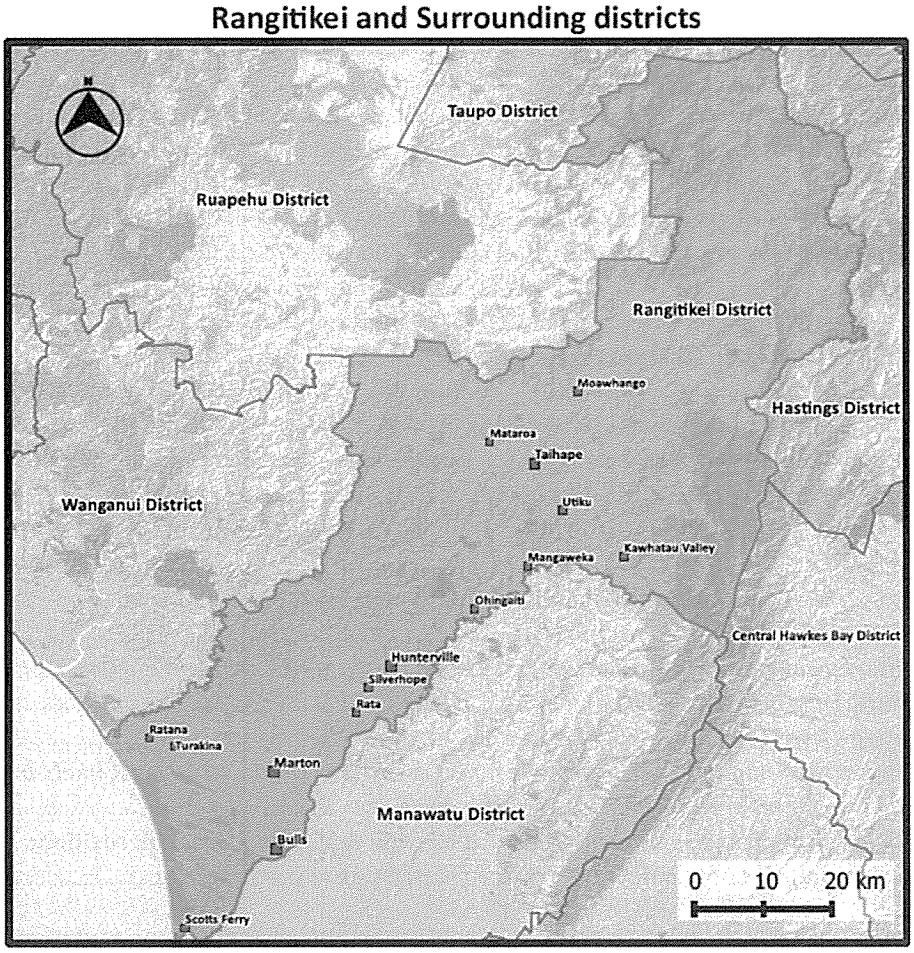


Figure 1: Map of Rangitikei and surrounding districts

Overview

In the Rangitikei District large scale forest establishment will increase future heavy traffic activity on rural roads. This activity will be spread over a number of years. Usage patterns will be non-linear as forest harvest schedules, log prices, harvest mechanisms and forest ownership dictate harvest patterns.

The resulting flow of harvested logs will create differing intensities of road use in certain areas. The resulting impacts on these roads will be varied. In large commercial plantations with a variety of age classes, forestry related traffic will be consistent and steady. In even age plantations, traffic density will be more intense and over a shorter period.

Within the Rangitikei District, forest establishment trends peaked in the early 1990s and have fluctuated since then. Due to these phases of large scale forest establishment, forest harvest schedules will coincide, changing road usage patterns and placing pressure on rural road maintenance schedules. The size and remote locations of some major forest lots will require road maintenance and harvest regimes that maintain both public use and harvest sustainability.

Forest harvest schedules will be most intense in the period 2020-2030 with over 50 % of the region's forest estate reaching harvestable age. A number of factors will influence the saleability of these forest areas. Nationally and internationally these include log and wood related product demand. The influence of carbon markets may also be a major factor. Locally, saleability will be influenced by forest harvest infrastructure such as staff, machinery (e.g. haulers), accessibility and forecast profit margins.

Maintaining road usage quality through harvesting periods will require proactive road maintenance schedules. Forecast tonnages and forestry-related road usage data forecast in this study will aid these maintenance schedules. Sustainable road maintenance schedules need to consider not just road base course development but also road width, vision benching, road gradient, corner turning radius and bridge width/height and weight loading.

Regionally, forest stakeholders include small and large private ownership, farm forestry, group commercial and private syndicate and large commercial forestry in both public and private ownership.

Plantation forestry in the Rangitikei District

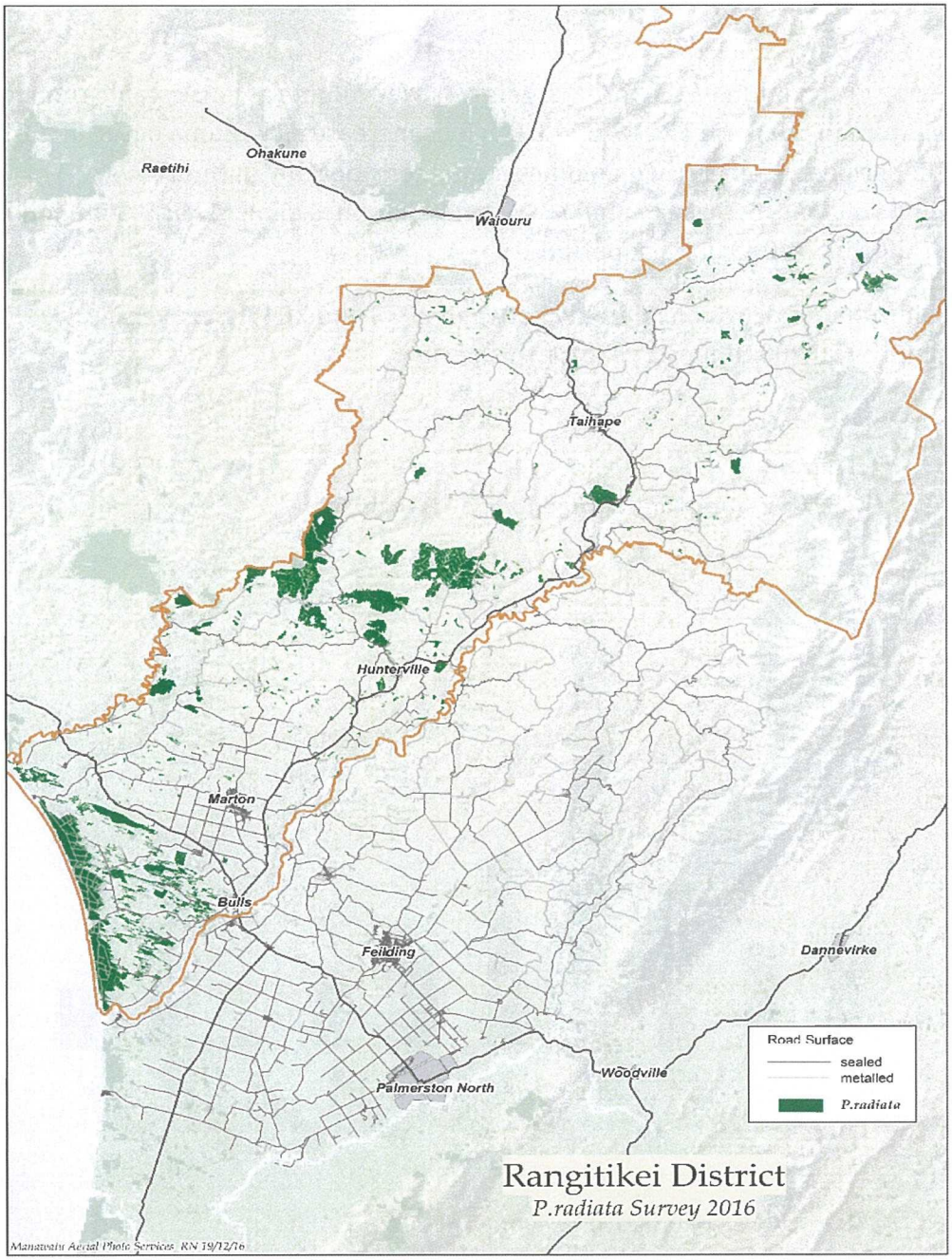
Forest ownership in the Rangitikei District is diverse. It is characterised by larger even-age class blocks in remote areas that are owned and managed by larger-scale owners, while smaller owners account for a larger number of smaller blocks.

***Figure 2**: Rangitikei District forestry-Key statistics*[1]

Nett stocked area within the Rangitikei District	20100 ha
Area weighted average age of forests at January 2017	19 years
Average tonnes per hectare of trees removed	530/ha
Pruned with production thinning	4675 ha
Pruned without production thinning	6591 ha

[1] Source: NEFD 2015 and Manawatu aerial mapping services –Forest survey 2016-17

***Figure 3**: Plantation forestry in the Rangitikei District*



Forecast district wood availability 2018-2047

The following graph outlines the forecast total district volume of harvestable timber that will mature in the period 2018-2047. Obvious increases in volume occur in the 2024-2032 period. This increased volumes jumps considerably in the 2027-2029 period when volumes increase to almost 1.2 million tonnes annually or 3.5 millions tonnes for the 2027-2029 harvest period. .

Harvestable volumes drop considerably between 2033 and 2047 and average approximately 150,000 tonnes a year for this period.

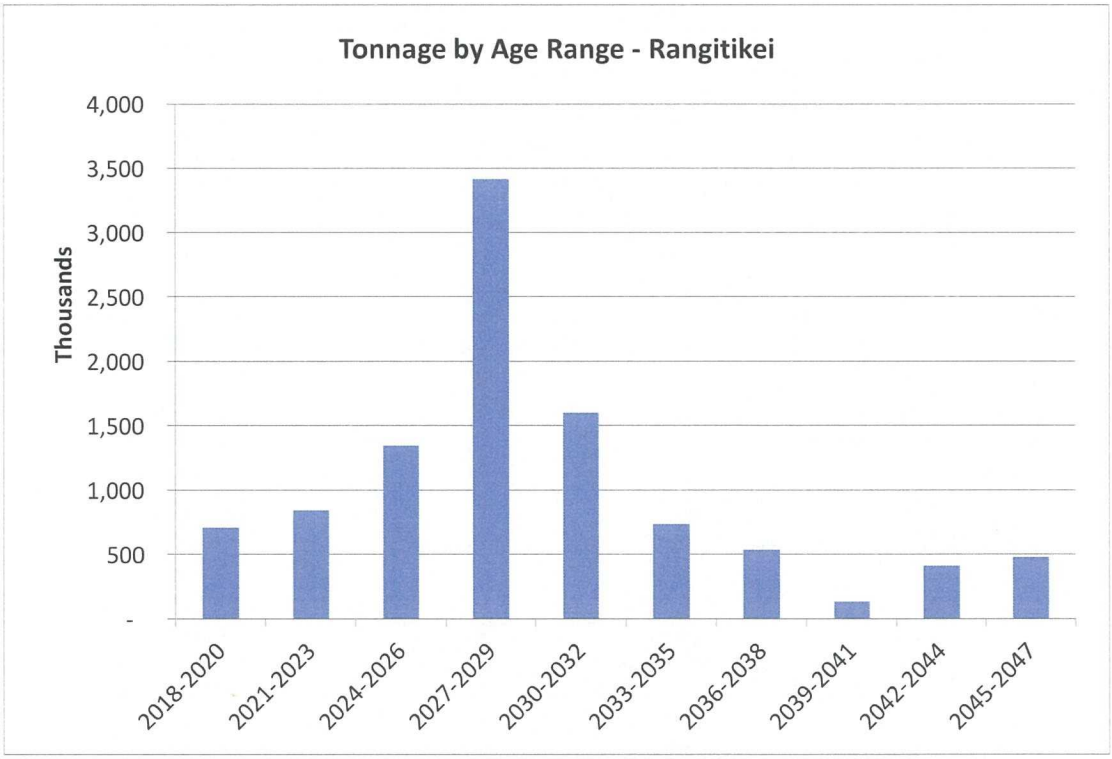


Figure 4: Total tonnage by harvest group in Rangitikei District 2018-2047

Data collection and methodology

GIS Study

A GIS study of the region's exotic forest resource was completed in November 2016 by Manawatu Aerial Photo Services . This description was considered accurate against NEFD[2] data and was an effective method of 'truthing' forest areas that have not been surveyed in recent years.

Results from this survey in addition to a number of field trips and interviews with forest owners in the district have formed the basis of providing accurate information for this report.

Forest parameters

The study used the following parameters to assess and map the region's forests.

- Year of establishment
- Age class
- Nett stocked area – against total polygon area or boundary shapefile
- Egress point onto public road – calculated by shortest distance from forest mid-point to nearest road.[3]

Against this data additional information was used to assess logged volumes and direction of log haulage.

- Potential logged volume/per ha of forest expressed as tonnes/ha
- Direction of travel of logged timber
- Road quality enroute and potential issues facing log transport flow.

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[2] National Exotic Forest Description 2015
[3] Actual forest egress points will differ dependent on harvest management plans.

Regional forecast of wood volume

Silvicultural regimes dictate to some extent the final logged volume of timber and subsequent tonnage that impacts on transport routes. A variety of silvicultural regimes exist in the Rangitikei District forest resource.

While it is hard to calculate exactly, a number of rules have been used to assume silvicultural trends in different areas. In inland hill country forest areas, most larger blocks are pruned and thinned without production thinning. These areas currently produce an average of around 550 tonnes/ha yield in logged volume. This volume may change by up to 50-80 tonne/ha depending on harvestability and other factors such as tree growth, soil type, rainfall and aspect.

In contrast, in the district's coastal areas most larger forest estate is primarily multiple rotation production forests managed for long term roundwood production and removals. These areas are often pruned *and* production thinned however they have a lower yield per ha. Final logged volume yield averages for these areas is around 430-450 tonnes/ha. The rotation length in coastal forests is often a few years longer than inland areas and roundwood removals often occur at around 15-20 years.

Regional averages

In quantifying the region's expected logging volume and subsequent logging-related traffic flows, a number of regional averages were calculated for the purpose of this study. These include:

Expected Yield (tons per hectare)
Variables affecting log yield include soil type, average annual rainfall, altitude, forest management regimes and to a lesser extent, storm-related weather events. Local average log yields can vary from 430 tons/hectare to 650 tons/hectare based on these variables. The average log yield/per hectare adopted for the purpose of this study is 530 tonnes/hectare to best represent log yields across the region and also across harvest periods.

Log extraction and traffic flows
Extraction methods used in modern production forest regimes can vary depending on forest size, forest type, location, accessibility and staff experience. Extraction rates and processing ability has a direct influence on logging related traffic flows.

Experienced logging gangs working on accessible country with minimum hindrance to production (i.e. cutover, slope relief, brush) can be expected to average up to 200 tonnes

a day through hauler extraction. Ground based operations can be expected to average 100 tonnes a day.

Ground based operations are expected to be the predominant method for the extraction of small scale forest (i.e. <10 hectares). Subsequent logging related traffic volume is therefore a measure of lot yield, gang productivity and forest lot size and accessibility.

Figure 5: Average harvest statistics for the Rangitikei district

Factor	Rate
Per hectare harvest yield (regional average)	530 tonnes
Average annual forest harvest (per gang)	100 hectares
Hauler extraction (per day)	200 tonnes/day
Ground based extraction (per day)	100 tonnes/day
Per truckload tonnage	28.8 tonnes

Wood haulage direction

Local transport flow

The direction of forestry-related traffic flows is influenced by a number of factors. Locally, route choice will be influenced by road standard, site access, bridges (e.g. loading limits, entry and exit angles), overhead obstructions (i.e. height limits), passing width, site access, paved/unpaved surface, traffic volume and road gradient. Key figures relating to rural road transport are set out below.

Figure 6: Logging related traffic -key statistics

Factor	Average
Minimum passing width (Logging truck)	5.5 metres
Minimum turning radius (Logging truck)	22-25 metres
Truckloads per day	6-7

Regional transport flow

Log quality and current log markets are primary indicators of the direction of logging related traffic flows on a regional scale. Regional location will also determine which route trucks will haul logs to market.

Other key determinants of route choice will be: distance to market and features enroute (e.g. difficult intersections, towns, 'give way' and 'stop' points, speed limits, efficiency of turnaround times and access to paved roads).

The below table provides an estimate of the directional quantity split enroute to market by showing the end route (state highway number) of the district's logs. Over the last few years the Railhead at Eastown, Wanganui is now taking mainly export logs and transhipping by rail to Napier. Currently, rail traffic to Wellington is intermittent due to the damage to the port there following recent earthquakes. Opportunity exists to increase the railhead hubs within the district and may in part be driven by road congestion issues on State Highways. These figures are based on current estimates of market stability and district log grade quality.

Figure 7: Estimated haulage direction of logged volume to processing

Volume split estimated enroute	**Percentage %**	**Route**
Pulp	8-10	SH1 North
Export	40-45	SH1 South/Rail South & East
Other	25	SH3 West
Other	25	SH 1 South/North

A key factor affecting up to 50% of log volume is the viability and activity of local mills and their ability to purchase and process a number of other log grades (i.e. other than pulp and export grade logs). This model also assumes current forest management regimes and silvicultural programmes will exist with newly established plantings.

Forest Harvest Schedules

The district forest estate comprises over 1500 separate planted forest lots. Forest management structures range from large commercial forest companies and joint venture forest initiatives to large and small scale farm forestry units and privately owned forests.

Forest age at harvest

Forest age at harvest can vary depending on forest management, market dynamics, lot size and infrastructure e.g. roading. Across the region forest ages at harvest can vary from 25-35 years depending on local growing conditions. For practical purposes a harvest age of 30 years has been adopted for this study.

To forecast the predicted dynamics in forest harvest volumes over the next 30 years, 3 year age class harvest groups have been used to represent predicted harvest schedules.

Figure 8: Harvest groups used for this study

Harvest group	Harvest Year	Age (years)
1	2018-2020	28 and older
2	2021-2023	25-27
3	2024-2026	22-24
4	2027-2029	19-21
5	2030-2032	16-18
6	2033-2035	13-15
7	2036-2038	10-12
8	2039-2041	7-9
9	2042-2044	4-6
10	2045-2047	1-3

Egress points

Egress points determine the entry point of forest related transport onto rural roads. These points provide a reference from which to forecast road maintenance schedules based on forestry related vehicular movements and tonnage travelling along the remaining section of road.

Egress points and road usage forecasts show the district's potential forestry-related transport activity. When combined with forest volume data this interplay creates a key indicator of forecasting forest impacts on low volume roads.

Factors influencing rural road egress points relate primarily to forest location; local topography, aspect, soil substrate and private ancillary roading development by forest

managers. Forests may have more than one egress point for a single forest compartment (i.e. even age crop) and this can be influenced by proximity roads, major waterways (e.g. creeks, gorges) and harvest techniques (i.e. hauler versus ground based).

Maintenance of egress points relates to size and age class structure of the forest. Larger commercial forest lots often maintain stable egress points based on prior harvesting and perpetual harvest regimes. However, smaller even age lots with remote access often have little or no forest roading infrastructure.

Results

A list of tables and graphs show the results of this study and are attached in the appendices. However, key figures include:

Harvest volume and harvest schedule

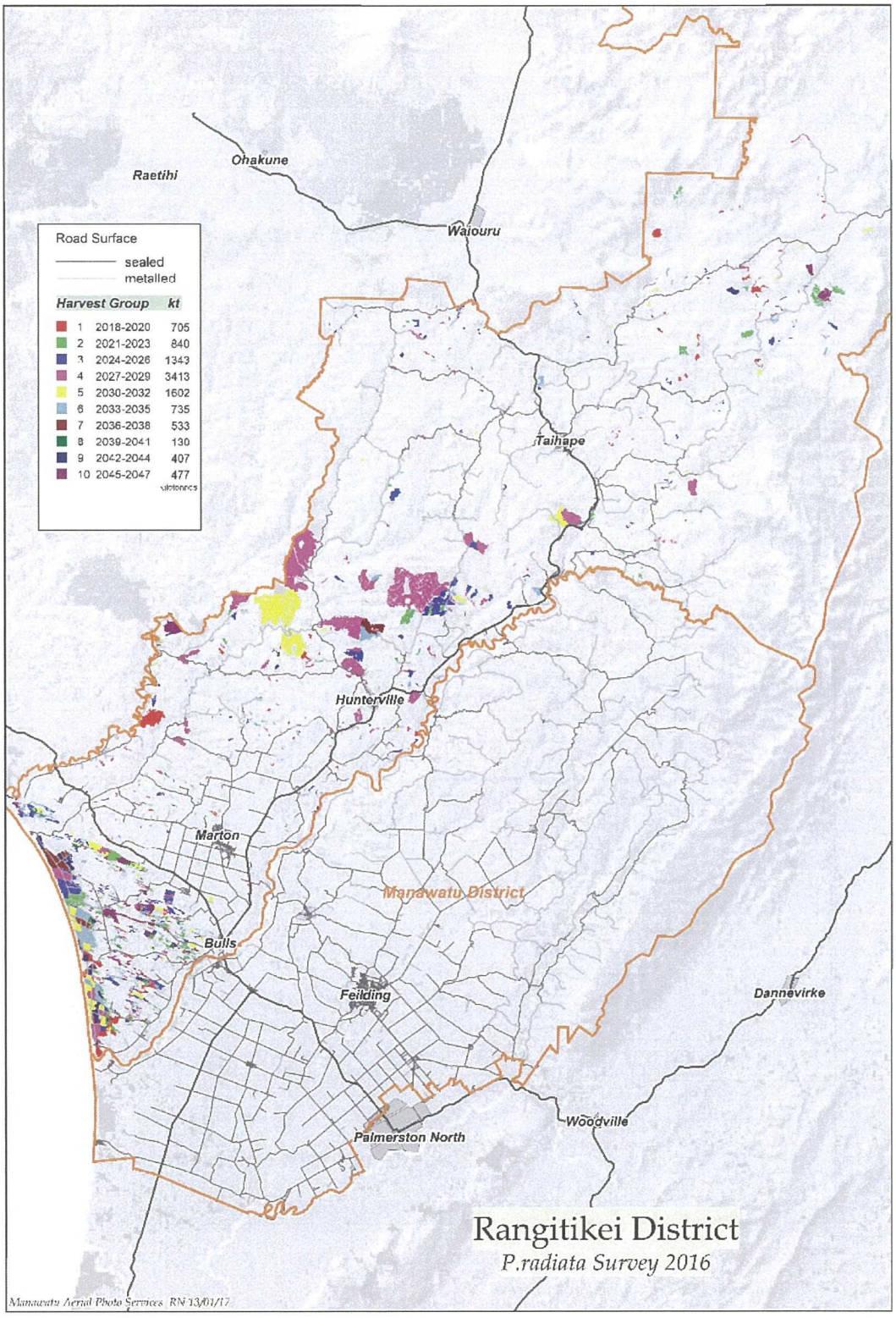
The data has shown some clear trends in harvestable age timber.

- 34% of total district harvestable tonnage occurs in the 2027-2029 period.
- 50% of total district harvestable tonnage occurs in the 2027-2032 period.
- A number of large even age woodlots will mature in the 2024-2032 period in the Hunterville forest epicentre.
- As an example, in the 2027-2029 period 50% of district tonnage occurs on 3 roads within the Hunterville forest area. These include:
    1. Turakina Valley Road
    2. West Road
    3. Watershed Road.
- The Santoft forest epicentre shows a more mixed spread of age classes and smaller lot size.

These results show a clear trend towards peak harvesting periods, age classes, forest locations and potential road usage scenarios.

The district does not have an equal spread of forest areas. Certain land types have suited the establishment of larger forest areas and in doing so have established two major district forest epicentres.

Figure 9: Harvest groups for the Rangitikei district



Major forest epicentres

Two major forest areas exist in the Rangitikei district. These two epicentres are outlined below.

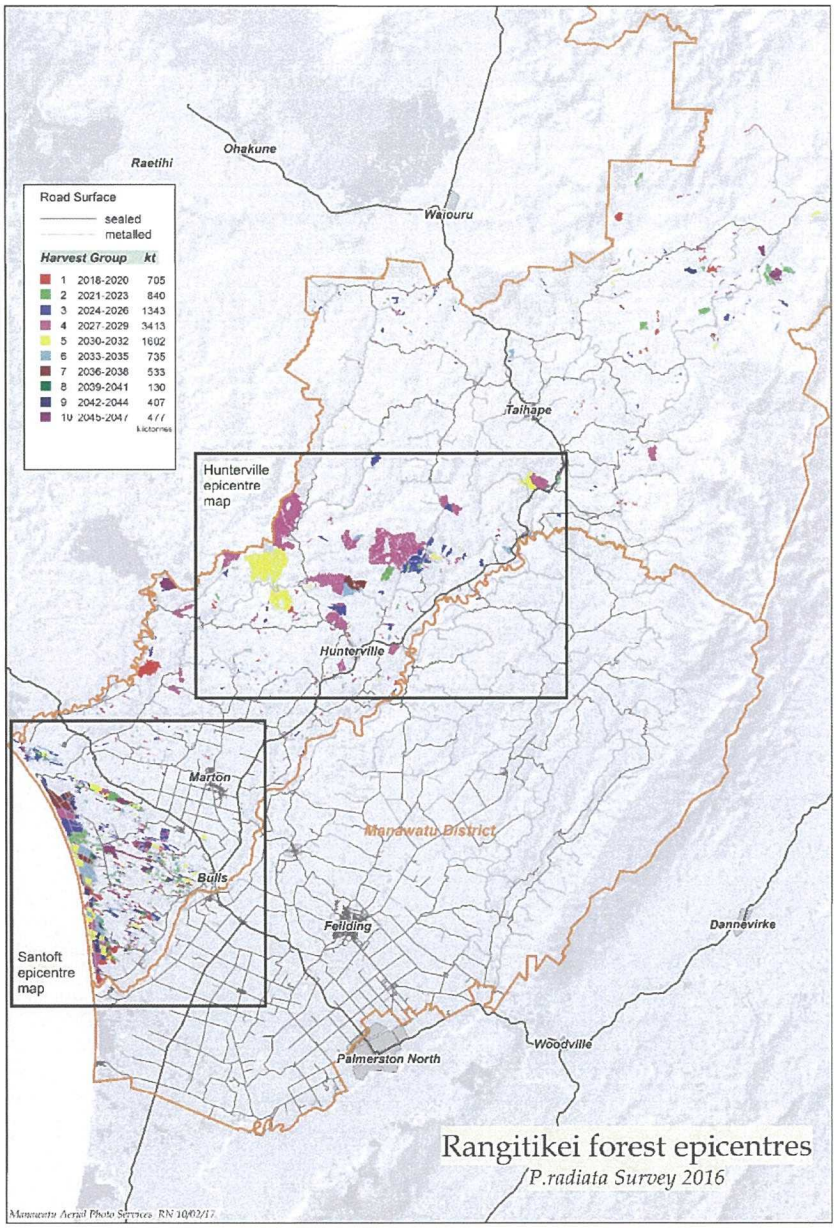


Figure 10: Rangitikei District forest epicentres.

Hunterville forest area

The Hunterville forest area is characterised by more remote hill country. Forest production is often higher (est. 550/tonnes ha yield) and forest lots are often larger and even-age.

Access to these areas is via lower volume rural roads and roads are often smaller and more technical for heavy traffic access. Harvest plans for forest areas are also more complex and involve the construction of forestry roads, skid sites and multiple hauler placements.

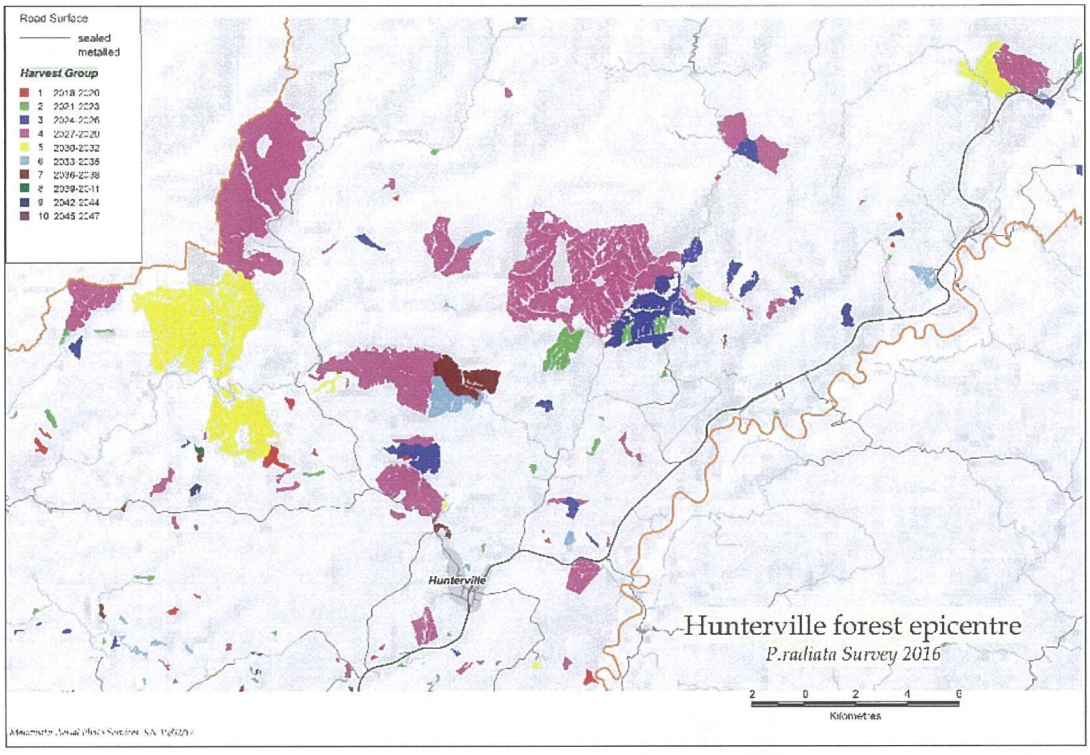


Figure 11: The Hunterville forest area.

Santoft forest area.

The Santoft forest area is a large area of forest established on coastal sand dune country that operates as a multi-year age class production forest. Access is often relatively simple and distance to State Highways in generally shorter.

Log yield per ha is slightly lower on average (430-450 tonnes ha) than hill country blocks, however production thinning of roundwood often takes place (at approximately 15-20 years) and this equates to approximately 80 tonne/ha additional wood volume removed.

Roads used to transport wood from these blocks are often straight, have minimal incline and decline and are mostly well-maintained for heavy traffic transport.

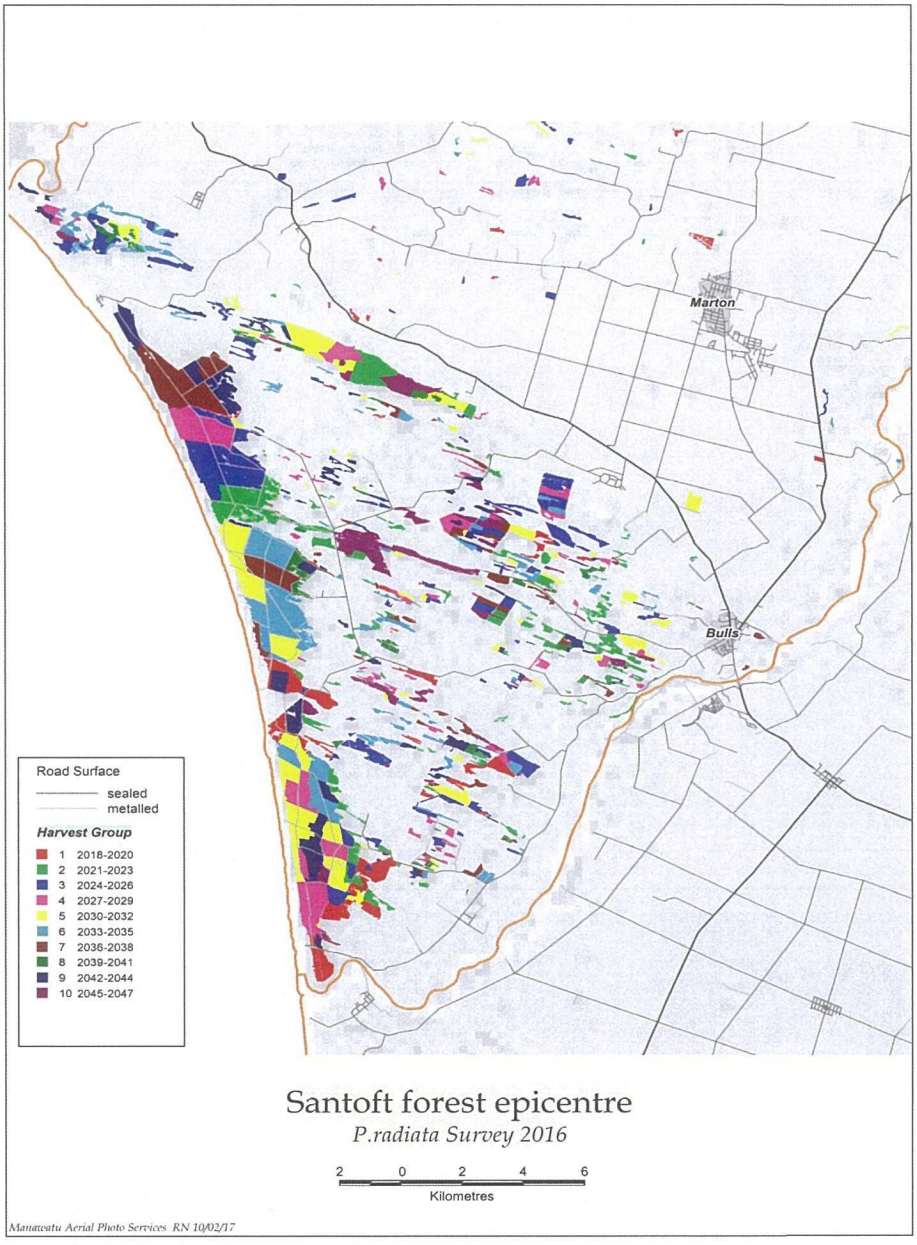


Figure 12: The Santoft forest epicentre.

Location, size and harvest schedule

In central and western areas of the district especially in proximity to the Hunterville forest area, forest lots closer to state highways often represent smaller mixed age forest lots and in more remote areas are characterised by larger even age lots.

Low volume rural roads in these areas will experience the biggest change in forestry related heavy traffic as large even age forest lots mature. These roads include primary and secondary roads used to transport logs to state highways.

Key roads include:

- Agnews Road
- James Road
- West Road
- Turakina Valley Road
- Kiekie Road
- Mangahoe Road
- Murimotu Road

Southern roads
In major southern areas (i.e. Santoft) egress points are fewer but represent an ongoing production forest cycle. As such, road usage will remain constant and is unlikely to be influenced by major even-age harvest. Forestry-related heavy traffic volumes are unlikely to change significantly.

High volume roads

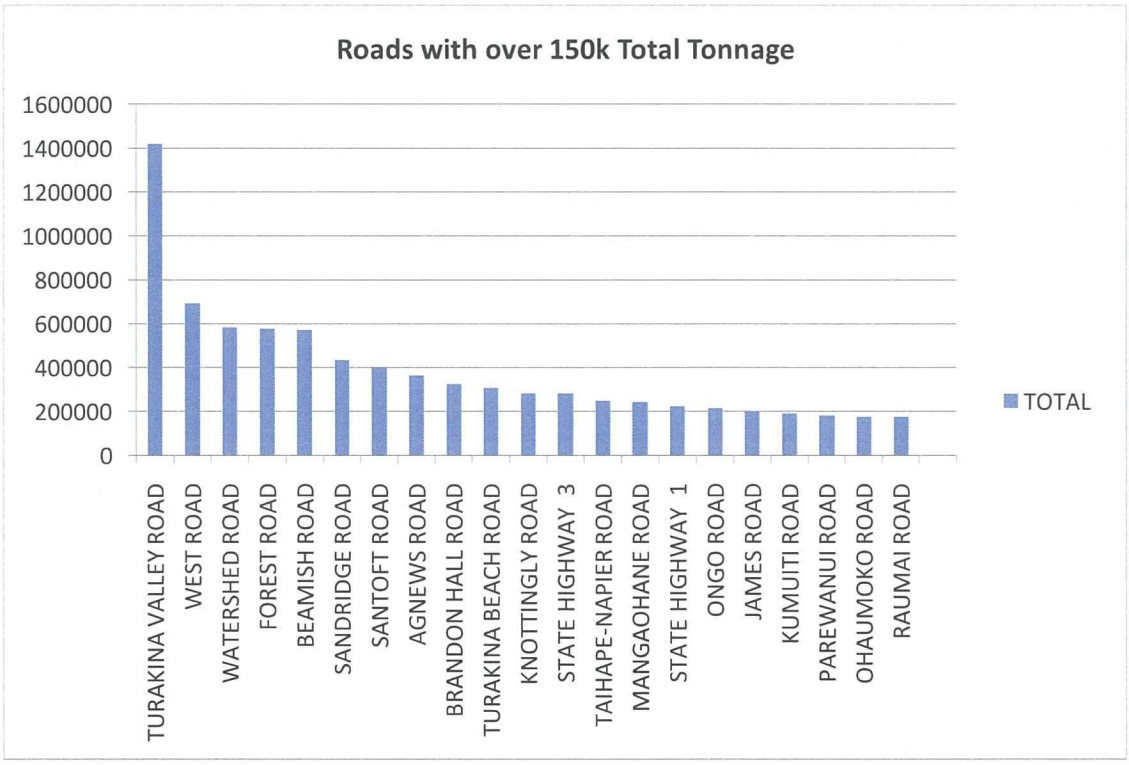


Figure 13: Highest volume forestry roads in the Rangitikei District 2018-2047

Trade flows: Log haulage direction

Convergence of heavy traffic flows will place pressure on other roads enroute to State Highways. The below table outlines various routes forestry related heavy traffic may take enroute to State Highways.

Figure 14: Likely transport routes from high volume forestry roads.

Road 1	Road 2	Road 3	Road 4
Turakina Valley Rd	Mangahoe Rd	Ongo Rd	SH1
West Rd	Murimotu Rd	SH1	
Watershed Rd	Kiekie Rd	SH1	
Forest Rd	Parewanui Rd	SH3	
Beamish Rd	Santoft Rd	SH3	
Sandridge Rd	Parewanui Rd	SH3	
Santoft Rd	SH3		
Agnews Rd	Murimotu Rd	SH1	
Brandon Hall Rd	Parewanui Rd	SH3	
Turakina Beach Rd	SH3		

Roading

Safety Considerations /Maintenance schedules

Pre-emption of factors influencing road usage quality during peak harvest periods will rely on proactive road maintenance schedules and effective communication between roading engineers, forest managers and public users.

Road safety

- Public traffic volume, potential traffic interactions, visibility, average speed on carriageway and communication are key determinants of accident causation.
- Road users need to be aware of forest operations and understand daily and weekly traffic flows to minimise accident potential.
- Public meetings/notices, heavy traffic signage, laybys, km markers, vision benching, driveway mirrors and in some cases radio communication are all effective means of minimising accident potential.

Road maintenance schedules

- Base course development will need to allow for appropriate consolidation periods prior to increased forest traffic volume.
- Base course development should allow for seasonal models in harvesting, harvest volumes and also severe weather events.
- Carriageway width needs to allow for appropriate visibility, speed limits, passing areas and overhead obstructions.
- Perimeter road fencing should also be assessed as a factor influencing potential low volume road width.
- Road gradient (especially on tight uphill corners) should be considered in maintenance schedules to minimise base course degradation.
- Culverts and road drainage systems need to be of a grade and quality to withstand increased weight loading, and potentially increased sediment flow from forest operations and severe weather events. The interplay between severe weather and poorly maintained culverts can be crucial in sustainable road use.
- Entry and exit angles from corners, bridges and egress points needs to be considered and allow appropriate distance for heavy traffic entry set up.
- Vision benching should be considered on blind corners and egress points to minimise accident potential.
- Forest managers and roading engineers need to discuss mechanisms for harvest machinery accessibility e.g. haulers. Potential exists for this to be a major limiting factor in forest harvestability and harvest periods.

Figures 22,23,27 and 28 show examples of common issues affecting roads in the region.

Key Considerations

Forest Industry Infrastructure: Limiting factors

All harvest periods outlined in this study rely on the availability of supporting forest infrastructure. The condition of local infrastructure relating to forest harvest could have a major influence on forest harvest timeframes and related traffic volumes.

Extraction timeframes

Extraction timeframes will rely on machinery and skilled staff availability. Currently, levels of appropriately skilled staff and machinery in the region will not be able to match the expected log harvest forecast.

Logging timeframes will also be influenced largely by gang productivity. Daily hill country production levels in this study have been based on 200 tonnes a day (hauler extraction) . This can vary from 150-250 tonnes a day dependent on site difficulty. However, if insufficient harvest infrastructure influences a fall in average productivity, harvest time-frames will increase. In this scenario, forest traffic volumes will be less intense but longer.

In summary, it is most unlikely that the large, even time-framed forest areas will be harvested within the windows outlined. It is more likely that a sustained harvest plan will be developed by forest managers and there is opportunity for RDC to work cooperatively with forest owners to link the roading development and maintenance programmes to this.

Conclusions

This study reaffirms the increase in afforestation that occurred during the early to mid 1990s. It also quantifies expected log yields per road and in doing so, prioritises road maintenance schedules for high volume roads in the region.

Road usage and egress point forecasts identify both high volume periods and harvest areas. Key wood availability periods exist between 2020 and 2032, these include harvest groups in the 2024-2026, 2027-2029 and 2030-3032 periods when over 50 percent of the region's forests reach harvestable age.

High-volume areas influencing low-volume roads are located in central and western. roads and carry a large percentage of regional volume. A relationship exists on these roads between distance from State Highway, large average lot size and even-age plantations. This relationship has implications for road maintenance schedules.

Variable log grade and wood product demand, carbon trading, local mill viability and forest infrastructure (machinery & skilled staff) are all major factors influencing future forest harvest, re-establishment and harvest timeframes.

Roading maintenance programmes should assess major harvest timeframes, areas and manage road maintenance schedules accordingly. These schedules should include public and forest manager communication, base course and associated road technical considerations including culverting and drainage.

Railheads are becoming an integral part of the forestry transport network, particularly as a means of easing congestion on State Highways. Opportunity exists at places like Hunterville to create hubs which may result in some realignment of feeder networks.

Recommendations

The following recommendations are encouraged before the 2020-2032 period.

- A survey of major forest owners (>100ha) should be undertaken prior to 2018-2020 period to determine forest harvest egress points onto rural roads more accurately.
- This data should be mapped using suitable GIS methods and used to map areas that represent harvest 'hot spots' and infrastructure bottlenecks e.g. bridge weight loadings, passing width and turning radius issues.

- Meetings should be held with major forest owners to discuss suitable methods of cooperative harvest schedules and infrastructure e.g. shared egress points, harvest plans
- That RDC work closely with Kiwirail and the forestry industry to facilitate new railheads where this may aid State Highway congestion.

Appendices

Figure 15: Age class distribution and associated tonnages Rangitikei District 2018-47

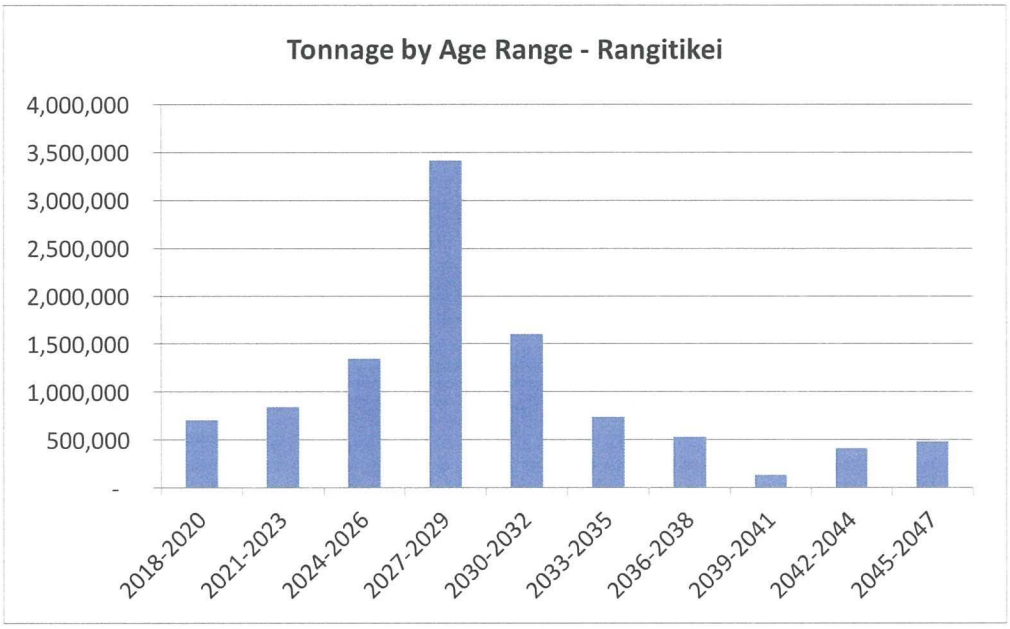


Figure 16: Estimated harvestable roundwood supply 2018-2047

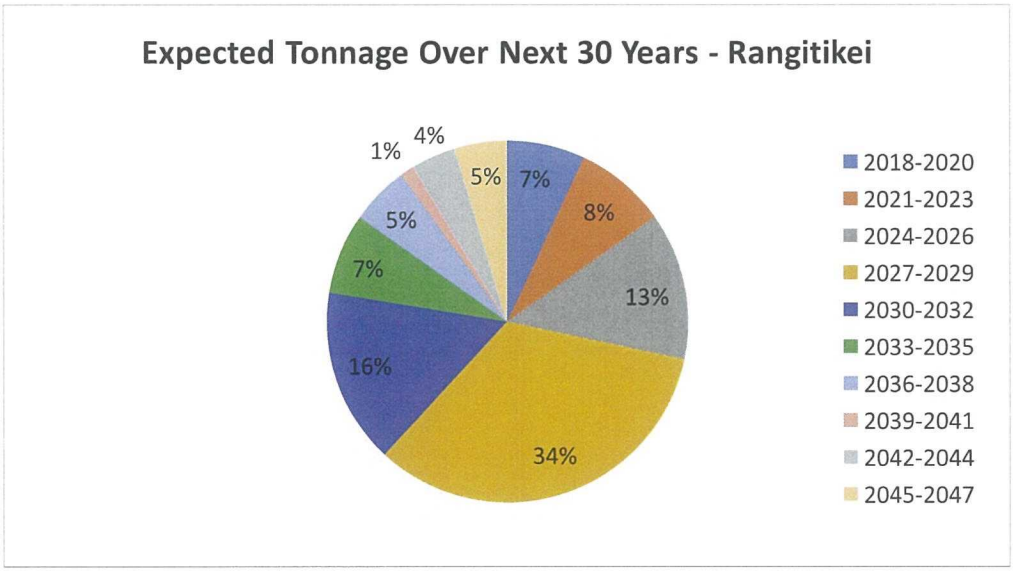


Figure 17: Forecast high volume forestry roads in the Rangitikei District 2018-47

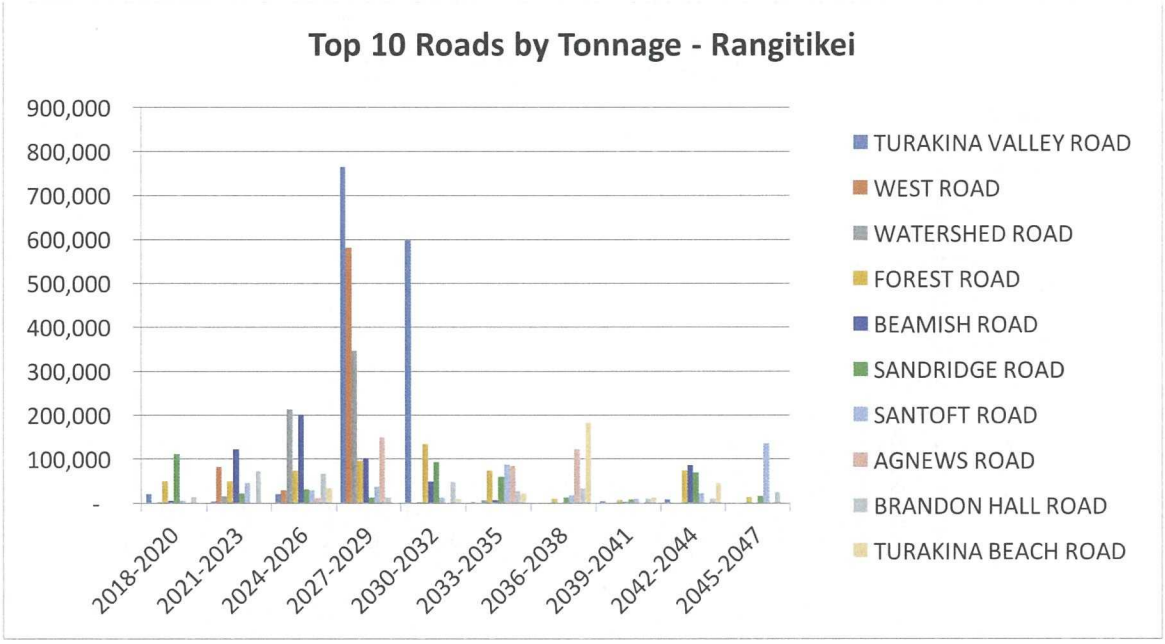


Figure 18: Highest volume forestry roads 2018-47. Rangitikei District

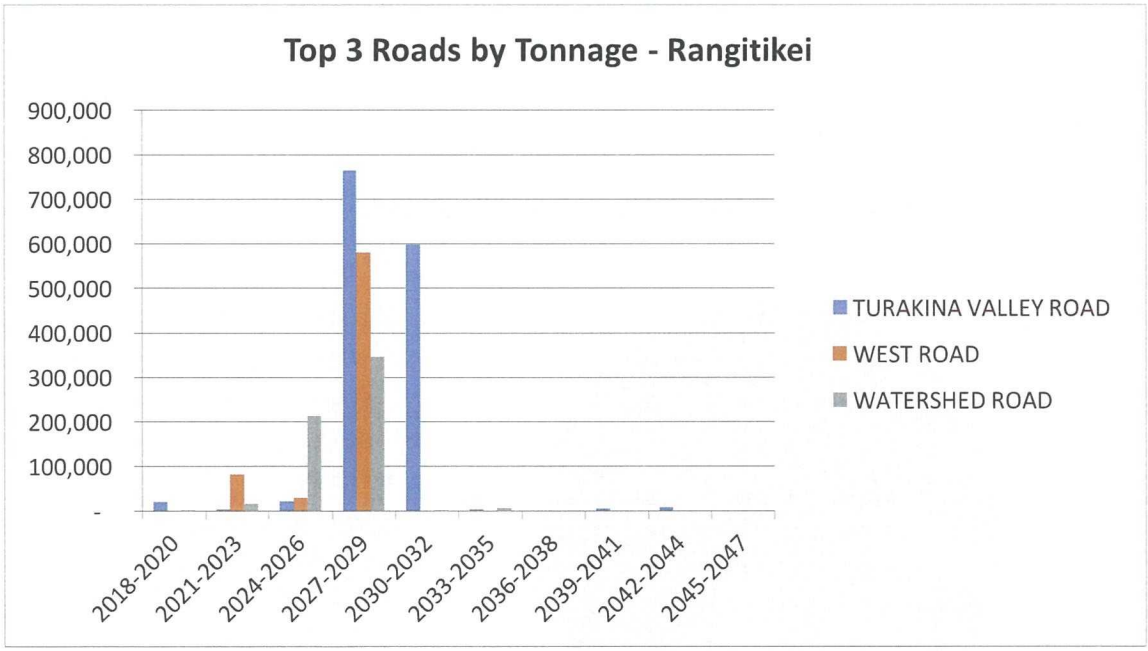


Figure 19: Roads with over 150,000 tonnes total tonnage.

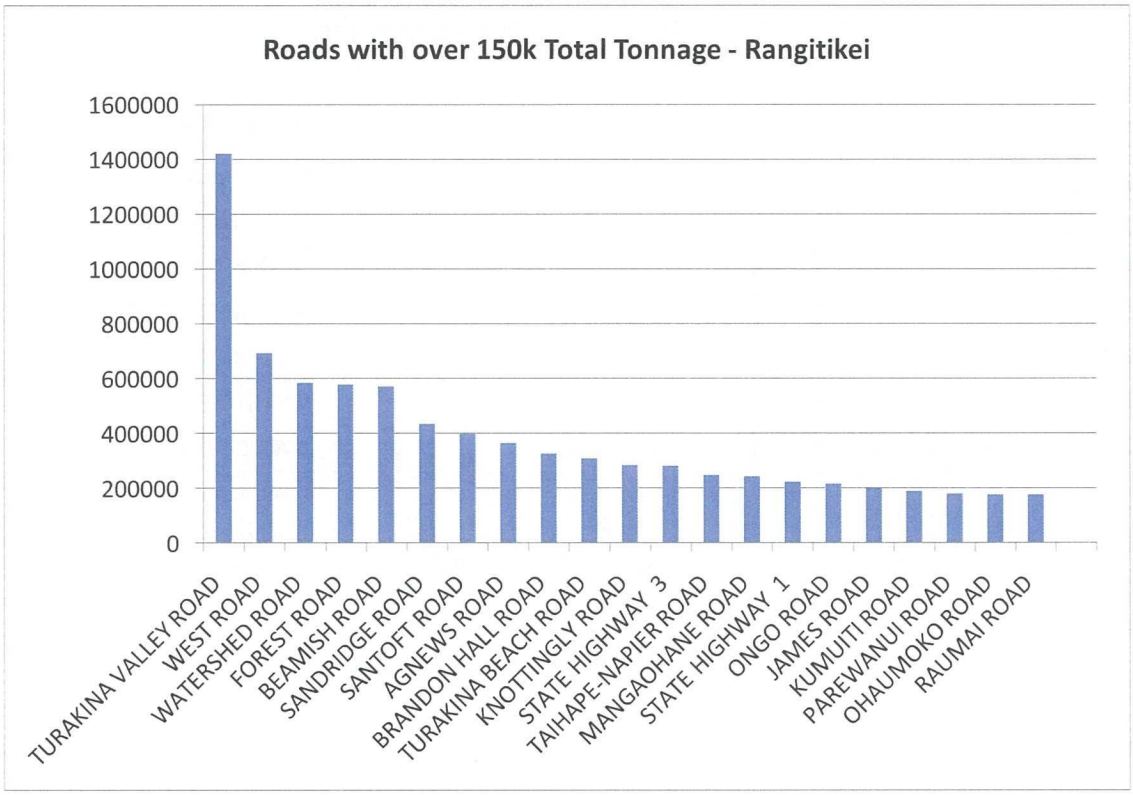
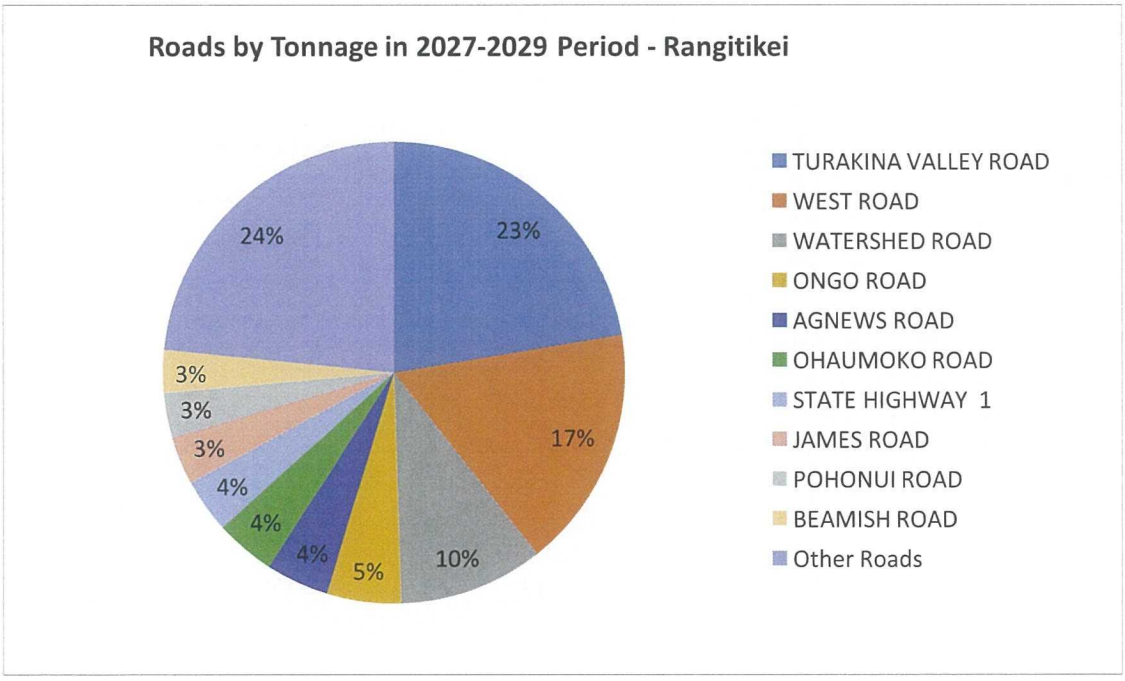


Figure 20: Relative percentage of harvestable volume by road. Rangitikei District 2018-47



Moore + Associates

HIGHEST TONNAGE BY ROAD -
RANGITIKEI REGION

(Key: >60k Pink; 50-60k Red, 40-50k Orange, 30-40k Yellow, 20-30k Green, 10-20k L Blue, 0-10k D Blue)

	Anticipated Harvest Period										
Nearest Road	2018-2020	2021-2023	2024-2026	2027-2029	2030-2032	2033-2035	2036-2038	2039-2041	2042-2044	2045-2047	TOTAL
TURAKINA VALLEY ROAD	19,610	2,968	20,246	763,730	597,310	2,544	-	3,710	7,473	-	1,417,591
WEST ROAD	-	81,567	28,567	579,979	-	-	-	-	-	-	690,113
WATERSHED ROAD	1,219	15,370	213,325	346,249	424	5,936	-	-	-	-	582,523
FOREST ROAD	49,078	49,131	72,716	95,983	133,984	73,723	8,904	5,459	73,352	13,674	576,004
BEAMISH ROAD	4,558	122,854	200,234	101,866	48,389	6,625	-	636	85,489	-	570,651
SANDRIDGE ROAD	110,823	21,465	31,959	11,978	92,962	58,989	11,130	7,950	69,748	15,317	432,321
SANTOFT ROAD	4,134	44,944	27,878	36,570	11,607	87,927	17,702	9,010	22,207	134,408	396,387
AGNEWS ROAD	-	-	9,805	148,559	-	82,945	122,377	-	-	-	363,686
BRANDON HALL ROAD	14,628	73,723	67,840	13,356	48,442	26,659	33,973	10,971	10,335	24,486	324,413
TURAKINA BEACH ROAD	-	1,007	34,344	1,537	9,381	21,465	182,161	12,243	44,944	-	307,082
KNOTTINGLY ROAD	-	-	-	-	51,781	136,687	65,879	27,401	-	-	281,748
STATE HIGHWAY 3	3,339	70,543	3,498	32,489	87,662	6,095	5,300	18,073	4,929	48,283	280,211

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TAIHAPE-NAPIER ROAD	106,265	26,447	5,883	30,952	33,284	9,911	3,074	-	30,316	-	246,132
MANGAOHANE ROAD	1,908	87,079	22,101	11,819	1,378	17,013	6,519	-	1,484	92,644	241,945
STATE HIGHWAY 1	4,664	13,462	36,517	129,691	7,420	29,627	1,166	-	-	-	222,547
ONGO ROAD	1,590	-	25,387	178,663	-	1,749	7,632	-	-	-	215,021
JAMES ROAD	-	-	-	114,268	85,542	-	-	-	-	-	199,810
KUMUITI ROAD	174,158	-	14,628	-	-	-	-	-	-	-	188,786
PAREWANUI ROAD	56,763	18,709	9,116	73,882	742	4,452	1,749	1,166	4,982	7,579	179,140
OHAUMOKO ROAD	-	16,801	12,455	143,418	-	-	-	-	-	3,074	175,748
RAUMAI ROAD	16,112	25,175	5,936	17,119	28,991	30,899	11,395	10,547	4,505	24,910	175,589
CHRISTOPHERS ROAD	-	-	-	-	147,870	-	-	-	-	-	147,870
POHONUI ROAD	1,378	13,356	-	108,014	-	23,002	-	-	-	-	145,750
MANUI ROAD	-	-	-	27,984	86,549	-	-	-	-	-	114,533
OKIRAE ROAD	-	-	6,413	-	-	-	1,696	-	-	102,714	110,823
KORAENUI ROAD	-	-	45,156	22,684	25,228	-	1,855	-	-	-	94,923
LAKE ALICE ROAD	-	318	43,248	21,253	-	8,268	-	-	-	-	73,087
MOKAI ROAD	-	2,385	-	63,971	2,544	-	-	-	-	-	68,900
GLASGOW ROAD	-	-	27,454	-	14,681	9,434	-	14,946	-	-	66,515
MANGAHOE ROAD	18,709	-	-	33,549	-	-	5,194	-	6,254	-	63,706
WHANGAEHU BEACH ROAD	-	-	8,056	11,819	-	18,974	-	-	10,918	7,208	56,975
RANGITIKEI VALLEY ROAD	-	37,630	18,974	-	-	-	-	-	-	-	56,604

GIBBON ROAD	-	-	53,530	-	2,809	-	-	-	-	-	56,339
TUTUPAPA ROAD	19,663	31,747	-	-	-	-	-	-	-	-	51,410
KAIMATAWI ROAD	3,869	4,452	15,635	17,967	-	-	-	-	4,505	2,809	49,237
MICKLESONS ROAD	-	-	-	44,679	-	3,392	-	-	-	-	48,071
MANGATIPONA ROAD	-	-	-	44,361	-	-	-	-	-	-	44,361
TAHEKE ROAD	-	-	42,718	-	-	-	-	-	-	-	42,718
MAKUHOU ROAD	-	-	-	36,994	-	-	-	-	-	-	36,994
MURIMOTU ROAD	477	7,844	16,854	8,215	-	-	-	-	-	-	33,390
TRICKERS ROAD	-	2,597	5,777	2,915	14,469	3,551	-	-	-	-	29,309
PAENGAROA ROAD	-	-	3,869	-	-	23,161	-	-	-	-	27,030
WAIMUTU ROAD	-	-	8,162	10,759	6,201	-	-	-	-	-	25,122
TWISS ROAD	-	2,862	-	848	2,597	583	2,332	5,459	9,911	-	24,592
DUNCAN ROAD	1,484	-	2,968	-	2,120	7,314	4,717	2,915	3,021	-	24,539
MAUKUKU ROAD	-	-	19,027	5,141	-	-	-	-	-	-	24,168
NGARURU ROAD	5,194	5,671	3,604	-	-	5,724	3,922	-	-	-	24,115
OTUAREI ROAD	11,872	-	12,031	-	-	-	-	-	-	-	23,903
SYMES ROAD	12,137	8,692	-	-	-	-	-	-	-	-	20,829
RANGATAHI ROAD	-	-	8,003	-	-	12,720	-	-	-	-	20,723
WESTON ROAD	1,219	1,060	15,158	-	1,537	-	-	-	-	-	18,974
MT CURL ROAD	-	3,233	2,862	7,155	1,590	2,173	1,643	-	-	-	18,656

RUANUI ROAD	-	-	5,830	12,402	-	-	-	-	-	-	18,232
DALRYMPLES ROAD	1,378	-	11,130	-	-	-	4,452	-	1,219	-	18,179
RIDGE ROAD SOUTH	-	-	-	18,126	-	-	-	-	-	-	18,126
RUATANGATA ROAD	-	-	954	15,635	-	-	-	-	-	-	16,589
PUTORINO ROAD	3,127	-	11,713	1,325	-	-	-	-	-	-	16,165
OMATANE SOUTH ROAD	10,441	-	-	4,982	-	-	-	-	-	-	15,423
CHELTENHAM HUNTERVILLE ROAD	8,268	-	5,459	-	-	-	-	-	-	-	13,727
MATAWHERO ROAD	-	-	-	1,749	-	-	11,607	-	-	-	13,356
BRIGHTWELL ROAD	-	-	-	-	12,349	-	-	-	-	-	12,349
TITIRANGI ROAD	2,915	9,381	-	-	-	-	-	-	-	-	12,296
GALPINS ROAD	-	-	3,975	-	-	8,215	-	-	-	-	12,190
BURRIDGES ROAD	-	-	9,222	-	2,544	-	-	-	-	-	11,766
RANGATIRA ROAD	-	-	-	8,003	3,392	-	-	-	-	-	11,395
KOEKE ROAD	-	-	4,134	3,710	3,445	-	-	-	-	-	11,289
KOUKOUPO ROAD	-	-	10,865	-	-	-	-	-	-	-	10,865
MANGAHOATA ROAD	-	-	-	-	10,335	-	-	-	-	-	10,335
KIE KIE ROAD	-	-	-	10,176	-	-	-	-	-	-	10,176
WAIARUHE ROAD	-	1,643	954	6,201	-	-	-	-	-	-	8,798
LEEDSTOWN ROAD	-	-	-	4,187	3,816	-	-	-	-	-	8,003

KELLY ROAD	-	-	-	3,286	4,664	-	-	-	-	-	7,950
OMATANE NORTH ROAD	-	-	7,685	-	-	-	-	-	-	-	7,685
OMANGO VALLEY ROAD	1,643	5,035	-	-	-	-	-	-	-	-	6,678
TAURIMU ROAD	-	1,749	4,823	-	-	-	-	-	-	-	6,572
REU REU ROAD	-	-	-	-	-	-	-	-	6,519	-	6,519
KAUANGAROA ROAD	-	-	-	-	3,233	-	-	-	3,180	-	6,413
KOTUKURAEROA ROAD NORTH	3,286	-	-	3,127	-	-	-	-	-	-	6,413
KAWHATAU VALLEY ROAD	530	-	5,671	-	-	-	-	-	-	-	6,201
MOORE ROAD	-	-	-	-	-	-	5,989	-	-	-	5,989
BEARDS ROAD	-	-	-	-	1,802	-	3,816	-	-	-	5,618
TOE TOE ROAD	-	5,565	-	-	-	-	-	-	-	-	5,565
MOAWHANGO VALLEY ROAD	-	1,272	3,392	848	-	-	-	-	-	-	5,512
TUHOE ROAD	-	-	5,459	-	-	-	-	-	-	-	5,459
POREWA ROAD	-	1,166	2,597	1,590	-	-	-	-	-	-	5,353
TUTAENUI ROAD	4,611	636	-	-	-	-	-	-	-	-	5,247
AUPUTA ROAD	-	-	3,922	1,007	-	-	-	-	-	-	4,929
GLENCAIRN ROAD	2,650	-	-	2,173	-	-	-	-	-	-	4,823
DEACONS ROAD	-	1,166	3,604	-	-	-	-	-	-	-	4,770
KAWEKA ROAD	-	-	4,611	-	-	-	-	-	-	-	4,611
TARAKETI ROAD	-	2,120	2,332	-	-	-	-	-	-	-	4,452

TENNANTS ROAD	-	2,862	-	-	-	-	1,537	-	-	-	4,399
MAKOKOMIKO ROAD	-	-	2,332	-	-	-	1,961	-	-	-	4,293
MATAIPONGA ROAD	-	-	-	4,187	-	-	-	-	-	-	4,187
HOWIE ROAD	-	2,544	1,484	-	-	-	-	-	-	-	4,028
MAKOPUA ROAD	1,219	-	2,809	-	-	-	-	-	-	-	4,028
PUKEOKAHU ROAD	-	-	2,756	-	-	1,166	-	-	-	-	3,922
PUKEKOA ROAD	-	3,604	-	-	-	-	-	-	-	-	3,604
UNION LINE	-	-	3,604	-	-	-	-	-	-	-	3,604
WARRENS ROAD	-	-	848	1,749	-	901	-	-	-	-	3,498
FERN FLATS ROAD	1,961	636	742	-	-	-	-	-	-	-	3,339
BALD HILL ROAD	-	-	-	3,286	-	-	-	-	-	-	3,286
ONEPUHI ROAD	-	-	-	-	3,286	-	-	-	-	-	3,286
TE MOEHAU ROAD	-	-	2,014	-	1,219	-	-	-	-	-	3,233
SMITHS ROAD	3,127	-	-	-	-	-	-	-	-	-	3,127
WATSON STREET	-	-	-	-	-	-	3,021	-	-	-	3,021
BRUCE ROAD	-	-	-	2,968	-	-	-	-	-	-	2,968
HARTLEYS ROAD	-	-	2,915	-	-	-	-	-	-	-	2,915
PAPAKAI ROAD	1,590	636	636	-	-	-	-	-	-	-	2,862
TORERE ROAD	2,703	-	-	-	-	-	-	-	-	-	2,703
WANGANUI ROAD	1,431	-	742	530	-	-	-	-	-	-	2,703

SCOTTS ROAD	-	848	-	-	-	-	-	-	1,749	-	2,597
TE KAPUA ROAD	2,597	-	-	-	-	-	-	-	-	-	2,597
JOHNSTON ROAD	2,544	-	-	-	-	-	-	-	-	-	2,544
ALDWORTH ROAD	2,385	-	-	-	-	-	-	-	-	-	2,385
RONGOITI ROAD	-	-	-	-	2,385	-	-	-	-	-	2,385
IRONWORKS ROAD	-	-	-	-	-	2,332	-	-	-	-	2,332
OMAHA ROAD	-	-	2,279	-	-	-	-	-	-	-	2,279
PUNGATAWA ROAD	-	-	2,279	-	-	-	-	-	-	-	2,279
PUKENAUA ROAD	-	-	2,120	-	-	-	-	-	-	-	2,120
PUKEHOU ROAD	-	2,067	-	-	-	-	-	-	-	-	2,067
KOTUKURAEROA ROAD SOUTH	1,590	-	-	-	-	-	-	-	-	-	1,590
OWHAKURA ROAD	-	-	1,590	-	-	-	-	-	-	-	1,590
OTAIHAPE VALLEY ROAD	-	-	-	-	1,537	-	-	-	-	-	1,537
RAPAKI STREET	-	-	1,537	-	-	-	-	-	-	-	1,537
WAIKAKAHI ROAD	-	1,325	-	-	-	-	-	-	-	-	1,325
VILES ROAD	-	1,166	-	-	-	-	-	-	-	-	1,166
KAKARIKI ROAD	-	-	-	-	-	954	-	-	-	-	954
WHAKA ROAD	-	848	-	-	-	-	-	-	-	-	848
TE KUMU ROAD	-	-	-	795	-	-	-	-	-	-	795
THE TERRACE	-	795	-	-	-	-	-	-	-	-	795

INLAND ROAD	-	-	689	-	-	-	-	-	-	-	689
MAKIRIKIRI ROAD	-	-	689	-	-	-	-	-	-	-	689
GOWERS ROAD	-	-	-	-	530	-	-	-	-	-	530
KAWERA ROAD	-	-	530	-	-	-	-	-	-	-	530
ZOHS ROAD	530	-	-	-	-	-	-	-	-	-	530
JOHNSON STREET	-	-	477	-	-	-	-	-	-	-	477
MARSHALL ROAD	-	-	-	371	-	-	-	-	-	-	371
COOKS ROAD	-	-	-	106	-	-	-	-	-	-	106
TOTAL	705,377	840,156	1,343,338	3,412,935	1,602,031	735,110	532,703	130,486	407,040	477,106	

Figure 21: Total harvestable tonnage by harvest group and road. Rangitikei District 2018-47

Figure 22: Road passing width and clear vision maintenance are key road maintenance issues on low volume rural roads.

Figure 23: In some areas existing roads make forestry related heavy traffic access unpractical and unsafe.

Figure 24: In some areas of steep hill country, steep relief and small lot size may mean some forest is not economically viable to harvest.

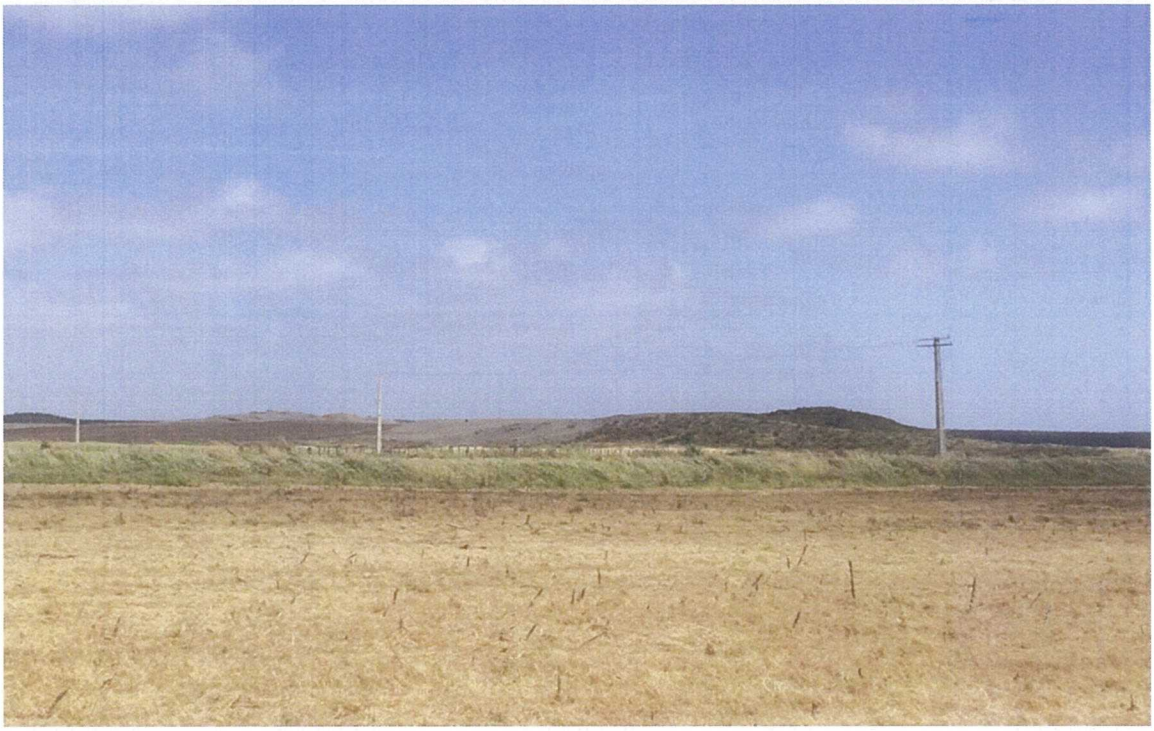


Figure 25: In some areas of the coastal forestry strip land has been converted from forestry back to pasture. In this case for dairy farming

Figure 26: Large forest lot bordering native bush northwest of Hunterville.

Figure 27: Watershed Road in the Hunterville forest area. This road will be most likely used to service large forest areas in the 2020-2032 period.

Figure 28: Geological processes can often degrade roads that otherwise look resilient. This type of road degradation is not an effect of forestry related heavy traffic.

Appendix 2

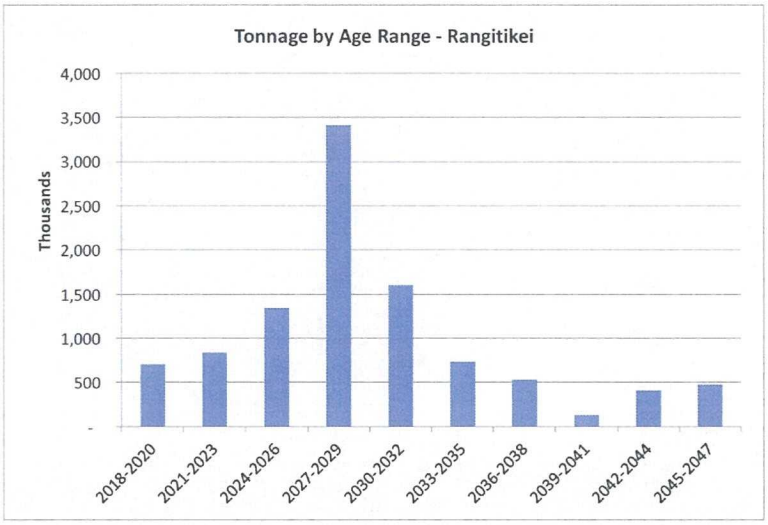
Rangitikei District Council

Impact of Forestry Harvest on Roading

Summary

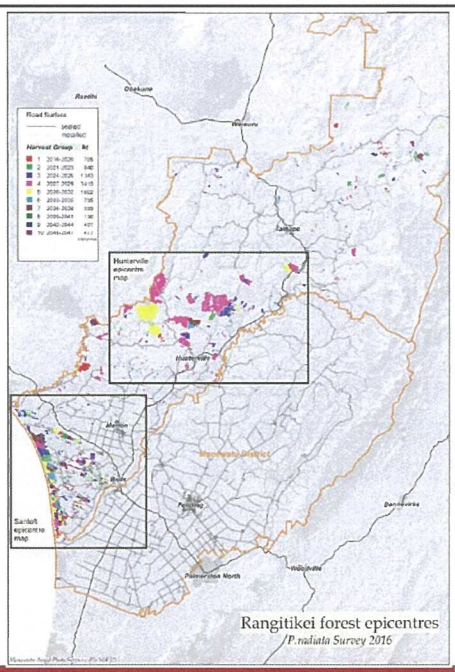
- Because there was large scale forest establishment during the 1990s there will be large scale forest harvests from 2021-2032.
- The peak will be between 2027 and 2029.
- This will change road usage patterns and place pressure on rural road maintenance schedules.
- The size and remote locations of some major forest lots will require road maintenance and harvest regimes that maintain both public use and harvest sustainability.

Forecast volume of wood supply on district roads 2018-47



Forestry Epicentres

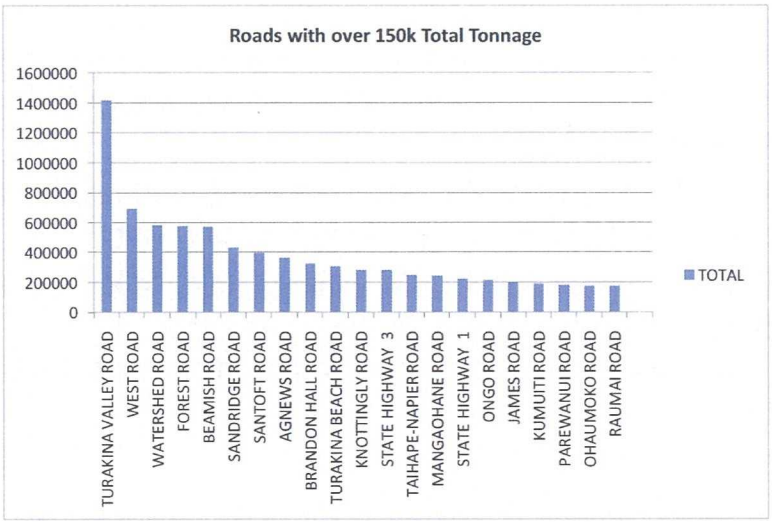
- Santoft forest area
- Hunterville forest area



Potential transport routes

Road 1	Road 2	Road 3	Road 4
Turakina Valley Rd	Mangahoe Rd	Ongo Rd	SH1
West Rd	Murimotu Rd	SH1	
Watershed Rd	Kiekie Rd	SH1	
Forest Rd	Parewanui Rd	SH3	
Beamish Rd	Santoft Rd	SH3	
Sandridge Rd	Parewanui Rd	SH3	
Santoft Rd	SH3		
Agnews Rd	Murimotu Rd	SH1	
Brandon Hall Rd	Parewanui Rd	SH3	
Turakina Beach Rd	SH3		

Roads affected by Forestry harvest



Operational Implications

Between 2027and 2029, 50% of district tonnage occurs on 3 roads within the Hunterville forest area. These include:

- Turakina Valley Road
- West Road
- Watershed Road.

Road Safety

- Public traffic volume, potential traffic interactions, visibility, average speed on carriageway and communication are key determinants of accident causation.
- Road users need to be aware of forest operations and understand daily and weekly traffic flows to minimise accident potential.
- Public meetings/notices, heavy traffic signage, laybys, km markers, vision benching, driveway mirrors and in some cases radio communication are all effective means of minimising accident potential.

Road maintenance

- Base course will need to support increased forest traffic volume.
- Allow for seasonal models in harvesting, harvest volumes and also severe weather events.
- Carriageway width needs to allow for appropriate visibility, speed limits, passing areas and overhead obstructions.
- Road fences may limit road width.
- Road gradient (especially on tight uphill corners) should be considered in maintenance schedules to minimise base course degradation.

Road maintenance continued

- Culverts, bridges and road drainage systems need to withstand increased weight loading, and potentially increased sediment flow from forest operations and severe weather events.
- Consider heavy traffic swept paths at entry and exit angles from corners, bridges and egress points.
- Vision benching should be considered on blind corners.
- Forest managers and roading engineers need to discuss mechanisms for harvest machinery accessibility e.g. haulers. Potential exists for this to be a major limiting factor in the ability to harvest and harvest periods.

Financial implications

- An assessment needs to be carried out on the rural pavement maintenance requirements.
- This body of work would provide an indication of the additional costs over and above the current forward works programme.
- An similar assessment carried out by Whanganui District Council revealed that there is very little difference between preventative maintenance and reactive maintenance costs.
- Whanganui estimate a cost of $20M over/above their current forward works programmed funding levels for the next 25 years.
- The Transport Agency will require evidence to support Funding Applications

Questions & Answers

Attachment 5

Report

Subject: **Mangaweka Bridge Update - March 2017**

To: Assets/Infrastructure Committee

From: Jim Mestyanek, Senior Project Engineer - Roading

Date: 1 March 2017

File: 6-RT-1-69

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1 Purpose

1.1 To inform Council of the progress along the proposed decision making process for treatment/upgrade of the Mangaweka Bridge in Ruahine Road.

2 Background

2.1 The bridge was constructed in 1904.

2.2 The bridge was designed originally to carry 30 tonnes (Class II).

2.3 The bridge has exceeded its design life, and now has a 6 tonne weight restriction.

2.4 Council recognises that the bridge requires some form of treatment to continue its life and service reliably for the next 25 year period. (and, if possible, to carry heavier loads)

2.5 Discussion and Options considered

2.6 Council staff have adopted the following sequential process to reliably assess the feasibility of an upgrade. We are currently involved in stages 3 & 4.

2.7 The process is required for NZTA to consider part-funding any part of the works.

2.8 The process is intended to result in a "no surprises" decision which all stakeholders and investors will be able to accept readily.

Mangaweka Bridge Decision Making Process (note: these costs are to be shared 50:50 with MDC)

Stage	Time Frame	Rough Order Cost	Results
1 Heritage Assessment	2014-15	Completed/paid	It is the only road bridge of its kind left in the country.
2 Condition Assessment	Feb-Apr 2016	Completed/paid	Steel truss & paint is relatively good. The timber girders are bad. The concrete piers show evidence of being undermined & require further investigation.
3 Strategic Business Case (SBC)	Jul 2016 – Feb 2017	Completed/paid	A proposed schedule of maintenance tasks. It is not possible to strengthen without significantly altering the structural form & architectural uniqueness of the bridge Option 1: Do nothing, 6 tonne, Rough Order Cost (ROC) $0.7m; Remaining Useful Life (RUL) 5-10 yrs Option 2: Do minimum, 26-30 tonne, ROC $7m; RUL 25 yrs Option 3: New single lane bridge off line to take vehicles but no cycles or pedestrians (7.3m wide), full highway loading, ROC $9.2m RUL 100 yrs (note includes Option 1 on existing bridge) Option 4: New single lane bridge off line to take vehicles, cycles, & pedestrians (10.8m wide) Full Highway Loading; ROC $11m, RUL 100 yrs (note includes Option 1 on existing bridge)
4 Indicative Business Case (IBC)	Feb-Jun 2017	$50,000	Will include consultation with public stakeholders, Regional Transport Committee, NZTA.
5 Detailed Business Case (DBC)	2017-18	$200,000	
6 Pre-Implementation (ie Design)	2018-19	$400,000	
7 Implementation (ie Construction)	2019-20	$11,350,000	
TOTAL expected costs		**$12,000,000**	

3 Operational Implications

3.1 The stages of the process described above are sequential. Progression to each new stage is not a given, but rather is conditional on the outcome of the previous stage.

3.2 If the Initial Business Case (IBC) indicates that a bridge replacement is the preferred option, then a variation to the Regional Land Transport Programme (RLTP) will be requested, and the case will be put to NZTA seeking funding for the Detailed Business Case. A simultaneous request will also be made to Manawatu and Rangitikei District Council's to fund the local share of the Detailed Business Case through the Annual Plan process.

3.3 If and when funding is secured the Detailed Business Case will commence.

3.4 The professional services required for the Detailed Business Case (DBC) are likely to be procured through an open competitive process. The DBC will identify a preferred mode of procurement of the physical works (ie traditional Design or Design & Construct).

3.5 The funding for the Pre-Implementation (Design) and Implementation (Construction) will be contingent on NZTA's acceptance of the Detailed Business Case, and inclusion of the project in the 2018-21 National Land Transport Programme.

3.6 However the funding will be included in the draft Activity Management Plan, Council's Long Term Plan, and the Regional Land Transport Programme.

4 Financial implications

4.1 Financial implications follow from the dollar values in the table.

4.2 The values shown in the table are total costs, to be split 50:50 to each Council.

5 Statutory Requirements

5.1 There are no statutory requirements at this stage.

5.2 Pre-Implementation will initiate both regulatory and legal processes (eg land transfers, resource consent, building consent).

6 Delegations

6.1 The delegated authority for accepting this report in the first instance is Council's Assets & Infrastructure Committee.

7 Consultation

7.1 No consultation is required for the acceptance of this report.

7.2 However, public consultation will occur in the course of Stage 4, Indicative Business Case.

8 Cultural Considerations

8.1 Cultural considerations will be taken into account in the course of Stage 4, Indicative Business Case.

9 Conclusion

9.1 We recommend that Council's A & I Committee accept this report and anticipate an invitation to the public consultation during the development of the Indicative Business Case.

10 Attachments

10.1 None

11 Recommendation

11.1 That the report 'Mangaweka Bridge Update - March 2017' to the Assets/Infrastructure Committee meeting on 9 March 2017 be received.

Jim Mestyanek
Senior Project Engineer - Roading

Attachment 6

Memorandum

To:	Assets/Infrastructure Committee
From:	Hamish Waugh, General Manager Infrastructure
Date:	3 March 2017
Subject:	**Water Safety Plan Statuses – February 2017**
File:	6-WS-3-11

1 Introduction

1.1 This report is a summary of Rangitikei District Council's current Water Safety Plan statuses with respect to six Water Treatment Plants, for the February 2017 period.

1.2 Pursuant to the Health Act 1956 and the Health (Drinking Water) Amendment Act 2007, Water Safety Plans must be in place for all plants. Reviews of each Water Safety Plan are required to take place on an annual basis.

2 Water Safety Plan Statuses

2.1 Table 1 shows the current status of the Water Safety Plan for each plant; the status of the Annual Review for each plant; the expiry date of each Water Safety Plan; the plan going forward to ensure compliance; and the progress made in the reporting period.

Plant	Water Safety Plan Status	Annual Review Status	Expiry Date	Plan Going Forward	Progress
Bulls	Approved June 2016	Up to date. Due next in June 2017	June 2021	WSP is up to date and reflective of plant operation – no immediate action required	N/A
Hunterville Urban	Approved February 2015 WSP is not reflective of current situation as	Due February 2017	February 2020	WSP is to be updated – agreed with DWA that this will be completed and lodged with them for	Hunterville WSP Annual Review for the 2016/2017 year and amended WSP Currently being considered by

Plant	Water Safety Plan Status	Annual Review Status	Expiry Date	Plan Going Forward	Progress
	UV is not included			approval by May 2017 Draft completed and being considered at present	operations staff. **Updated WSP to be completed by 30/05/17 and to DWA**
Mangaweka	Approved September 2015	Up to date. Due next in September 2017	September 2020	Changes have been made to the WSP to reflect the s10 supply parameters.	WSP has been updated and amended to include monitoring criteria so that Mangaweka can be monitored pursuant to s10 DWSNZ. At draft stage.
Marton	Approved December 2015	Up to date. Due next in December 2017	December 2020	WSP is up to date and reflective of plant operation – no immediate action required	N/A
Ratana	No Water Safety Plan in place at present	-	-	Ratana WSP to be completed in tandem with the completion of the new WTP at Ratana	Await completion of bore and plant at Ratana.
Taihape	Approved September 2015	Up to date. Due next in September 2017	September 2020	WSP is up to date and reflective of plant operation – no immediate action required	N/A

3 Recommendation

3.1 That the memorandum 'Water Safety Plan Statuses – February 2017' be received.

Hamish Waugh
General Manager Infrastructure

Attachment 7

Memorandum

To: Assets/Infrastructure Committee

From: Michael Hodder

Date: 3 March 2017

Subject: **Including a health and safety dimension within the Council's procurement policy**

File: 3-PY-1-7

The Health & Safety at Work Act 2015 places greater responsibility on the Council to be sure that its contractors have robust health and safety policies and procedures. The pre-qualification process (shared with Manawatu District Council) has been an important step for Council to have that assurance.

However, it is important to signal this requirement during the procurement process. Accordingly, it is suggested that the following additions be incorporated into Council's procurement policy:

Page 19	Rule 19 Add as 3 d: 'documented health and safety policies and procedures'
Page 25	Rule 26 Add at end of 3 f: 'including evidence of robust health and safety policies and procedures'
Page 30	Rule 32 Add 1 g. 'lack of evidence of robust health and safety policies and procedures'
Page 32	Rule 33 Add following 1 b. ii. 'Note: A contract will not be awarded if Council is not satisfied that the contractor has robust health and safety policies and procedures.'

The relevant pages from the policy are attached as Appendix 1.

Recommendations

1. That the memorandum 'Including a health and safety dimension within the Council's procurement policy' be received

2. That the proposed amendments [as further amended /without further amendment] to the Council's procurement policy to include a health and safety dimension be adopted.

Michael Hodder
Community & Regulatory Services Group Manager

Appendix 1

Rule 17

Delivery date

1 When identifying or estimating the delivery date for the goods, services or works, Council should take into account any of the following factors that apply:

   a. the complexity of the procurement

   b. how much subcontracting there might be

   c. a realistic time to produce, stock and transport goods from the point of supply to the delivery address

   d. a realistic time to deliver services given their nature and scope.

Rule 18

Technical specifications

1 Council must not apply technical specifications or prescribe conformance requirements in a way that creates unnecessary obstacles for suppliers.

2 Where appropriate, technical specifications must be based on:

   a. performance and functional requirements, not on design or a prescribed licensing model or a description of their characteristics

   b. international standards where they exist, or the appropriate New Zealand or Australian standards, technical regulations or building codes.

3 When Council describes technical specifications, it must not (except under Rule 18.4):

   a. require or refer to a particular trademark or trade name, patent, design or type

   b. refer to the specific origin of the goods, services or works or the name of the producer or supplier.

4 The exception to Rule 18.3 is when it is the only way to make the requirements understood. In this case, Council must include words like 'or equivalent' in the specification and make it clear that it will consider equivalent goods, services or works that can be demonstrated to fulfil the requirement.

Rule 19

Pre-conditions

1 Council may include essential conditions about capacity or capability in its Notice of Procurement. These are called pre- conditions.

2 Suppliers must meet all of the pre- conditions to be considered for the contract opportunity.

3 Council must limit pre-conditions to the following critical areas:

   a. legal capacity financial capacity

   b. commercial or operational capacity or capability to deliver

   c. appropriate technical skills or expertise or relevant experience.

4 Council must not make it a pre- condition that a supplier has been previously awarded a contract by a named buyer or another New Zealand Local Authority.

5 To assess whether a supplier meets the pre-conditions, Council must:

   a. evaluate responses against the pre-conditions that it published in its Notice of Procurement, and

   b. take into account the supplier's business activities in New Zealand and overseas.

Pre-conditions

Pre-conditions allow Council to do a 'first cut' and eliminate suppliers who do not have the minimum capacity or capability to deliver the contract.

Pre-conditions are usually answered by 'yes' or 'no', or 'meets' or 'does not meet'.

Suppliers who meet all of the pre-conditions are then eligible to be assessed against the scored evaluation criteria.

What should be included in a Notice of Procurement?

Everything that suppliers need to know about the contract opportunity in order to prepare meaningful responses must be included.

Rule 26

Content of Notice of Procurement

1 Each Notice of Procurement must contain all of the information that suppliers need to prepare and submit meaningful responses.

2 Each Notice of Procurement must clearly identify which procurement process is being used (eg Request for Quote or Registration of Interest followed by a Request for Tender).

3 Each Notice of Procurement must contain the following information:

a. the Council's name and address

b. the name and contact details for the Council's contact person

c. a description of the goods, services or works and any technical specifications, plans, drawings or instructions, or a description of the outcomes the supplier is expected to deliver

d. the quantity (if known) or estimated quantity of the goods, services or works

e. the estimated timeframe for delivering the goods, services or works, or the estimated length of the contract and any options relating to the length of the contract (eg 3 + 2 + 1)

f. any service levels, response times or other performance measures suppliers will need to meet

g. any conditions for participating in the procurement process including any pre- conditions (Rule 25) or certificates or standards the supplier must meet

h. any limitations on the number of suppliers that may be shortlisted

i. all evaluation criteria Council will use to assess responses

j. unless the price is the only criterion, an indication of the relative importance of each evaluation criterion

k. the deadline and address for submitting responses

l. any restrictions or instructions on how suppliers are to submit responses (eg faxes will not be accepted) or details of how responses are to be submitted through an e-procurement system

m. any other terms or conditions relating to the procurement or the procurement process

n. if the procurement will be conducted electronically (eg using e-tender software), all the information suppliers will need to participate electronically

Evaluation criteria

The form of the evaluation criteria (Rule 35.3.i.) that you include in the Notice of Procurement will depend on the type of process, eg:

- for a one-step Request for Tender, you would usually list the criteria you will use to award the contract
- for a multi-step process, you would usually list in the Registration of Interest the criteria you will use to shortlist suppliers. In the subsequent Request for Tender or Request for Proposal you would list the criteria that you will use to award the contract.

Relative importance

When listing the evaluation criteria (either in the Notice of Procurement or subsequent RFP or RFT), you must, unless price is the only criterion, indicate the relative importance of each criterion (Rule 35.3.j.). You can achieve this by ranking the criteria in priority order or adding individual weightings to each criterion.

Evaluating responses

Rule 31

Treatment of responses

1 Council **must** have in place procedures that guarantee all suppliers' responses are treated fairly. This includes receiving, opening and evaluating responses.

2 To be considered for an award of contract, a supplier **must**:

a. submit its response in writing (this can be through electronic means such as email if specifically allowed for in the Notice of Procurement)

b. comply with all pre-conditions if any, or other conditions for participating in the contract opportunity.

3 Council **must not** penalise a supplier who submits a late response, if the delay is solely the Council's fault.

4 If, after opening the responses but before evaluating them, Council offers a supplier the opportunity to correct unintentional errors, it **must** offer the same opportunity to all participating suppliers.

Rule 32

Reasons to exclude a supplier

1 Council may exclude a supplier from participating in a contract opportunity if there is a good reason for exclusion. Reasons for exclusion include:

a. bankruptcy, receivership or liquidation

b. making a false declaration

c. a serious performance issue in a previous contract

d. a conviction for a serious crime or offence

e. professional misconduct

f. an act or omission which adversely reflects on the commercial integrity of the supplier

2 Council **must** not exclude a supplier before it has evidence supporting the reason for the exclusion.

If it is discovered that the same errors appear in responses from different suppliers (eg misspelled words or the same mathematical mistakes), this may indicate that these suppliers have shared information (eg cut and paste from each other's responses) and may be acting anti-competitively.

For more examples, see the Commerce Commission fact sheet, How to recognise bid rigging, at: www.comcom.govt.nz

Awarding the contract

Rule 33

Awarding the contract

1 Council must, unless there is a legitimate reason to cancel the procurement, award the contract to the supplier/s that has both:

   a. demonstrated that it fully understands and has the capability to deliver the requirements and meet the contract conditions, and

   b. offered either the:

      i. best value for money over the whole of the life of the goods, services or works (which isn't always the cheapest price), or

      ii. lowest price, if price is the only criterion.

2 If a supplier offers a price that is substantially lower than other responses (an abnormally low bid), Council may seek to verify with the supplier that the supplier is capable of both:

   a. satisfying all of the conditions for participation, if any, and

   b. fully delivering all of the contract requirements (eg quality, quantity, time and location) and meeting all of the contract conditions for the price quoted.

A **legitimate reason** to cancel a procurement could include a:

- Change of policy
- Change to an appropriation that affects funding for the initiative
- Council direction

Look out for **abnormally low bids**. An abnormally low bid may reflect a more efficient supplier or one that is willing to make an investment in the relationship by taking a lower margin on the contract. Such competitive responses should be encouraged but ensure a robust evaluation process to ensure that a low bid will not impact negatively on service delivery? Council should check an abnormally low bid with the supplier to make sure that the price is realistic and that the supplier can fully deliver the contract for that amount. If the supplier is unable to demonstrate this, Council may consider rejecting the bid. First, make sure the conditions have stated that the lowest price bid will not necessarily be accepted. An abnormally low bid could also be the result of the supplier taking advantage of its market power in breach of section 36 of the Commerce Act 1986. Report any such concerns to the Commerce Commission at: www.comcom.govt.nz

A bid that is substantially lower than other bids can sometimes be a sign that a cartel may be operating in the market. For examples see the Commerce Commission's fact sheet, How to recognise bid rigging, at: www.comcom.govt.nz

Attachment 8

Memorandum

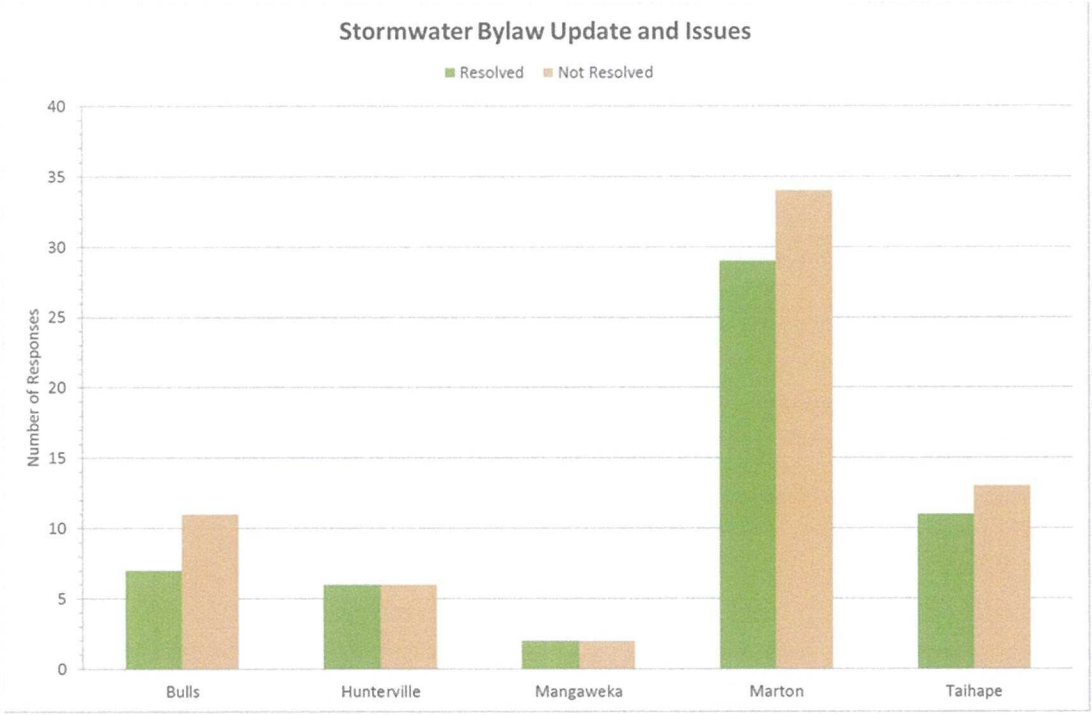
To:	Assets/Infrastructure
From:	David Miller
Date:	3 March 2017
Subject:	**Update On Progress With Resolving Outstanding Issues With The Water Related Services Bylaw (Parts 2 and 3 public and private drains)**
File:	1-DB-1-11

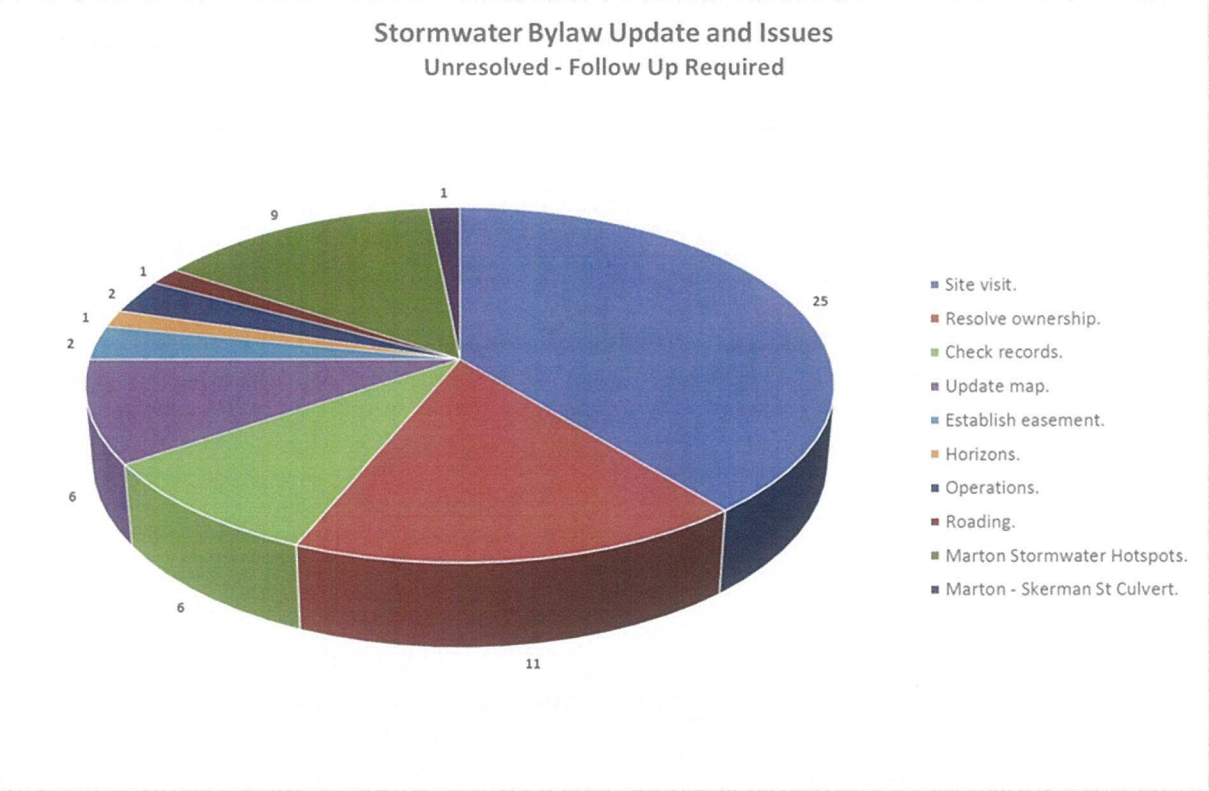
Background

The Water Related Services Bylaw has two sections relating to stormwater drainage which have not yet been put into effect. There were a number of submissions received during the initial consultation phase which have taken time to resolve. The priority therefore is to finish responding to submitters on the 2013 Bylaw changes, so Parts 2 and 3 (relating to stormwater) can be enacted. Any further changes to the Bylaw, previously reported to the committee at its meeting on 9 May 2015 would come after this.

This memo provides a brief update on progress to resolve these outstanding issues. It is anticipated that a deliberations report on the outstanding submissions will be presented to the Committee within two months.

The information is presented graphically.





Notes:

1. "**Resolved**" refers to Assets staff having made a determination on the relevant submission (whether or not this determination is in agreement with the opinion of the submitter).
2. For the unresolved issues, Assets staff will work on those marked "Resolve Ownership", "Check Records" and "Update Map".
3. "**Resolve Ownership**" means that further consideration is required before an authoritative decision can be made.
4. "**Check Records**" means further investigation is required e.g. review of property files.
5. "**Update Map**" means that changes to IntraMaps are required before the issue can be considered "resolved".

David Miller
Asset Engineer

Attachment 9

Memorandum

To:	Assets/Infrastructure Committee
From:	Hamish Waugh, General Manager Infrastructure
Date:	3 March 2017
Subject:	**Consent Compliance - February 2017**
File:	5-EX-3

1 Introduction

1.1 This report is a summary of Rangitikei District Council's compliance with resource consent conditions from Horizons Regional Council, for the February 2017 period. Information on compliance has been derived from our Water Outlook system, and where applicable, communications with compliance monitoring officers at Horizons.

1.2 Note that in 2016/2017 compliance reports have been forwarded to Greg Bevin, Horizons Regulatory Manager, to keep Horizons informed of progress towards full compliance. Greg Bevin has requested specific progress reporting on agreed compliance actions for Hunterville and Taihape Wastewater Treatment Plants. The specific detail requested is included as an appendix to this consent compliance report.

2 Water Supply

2.1 Table 1 shows the compliance of each water supply scheme against consent conditions. Only those schemes for which Rangitikei District Council is the consent holder have been shown.

Table 1: Consent Compliance – Water Supply

Scheme	Compliance February 2017	Comments	Actions
Marton	Water abstraction consents. Compliant	-	-

Scheme	Compliance February 2017	Comments	Actions
	WTP discharge consent. Consent Renewal Application lodged	The volume of the combined filter backwash & alum sludge discharge to the settling ponds is used as a surrogate measure for flow discharged from the ponds as actual outflow cannot be measured. During February this surrogate measure has only been higher than the consent outflow limit on one occasion.	A consent renewal application was lodged on 12 August 2016. The renewal application has sought an optimisation of the activity authorised by the existing consent, rather than a change in activity, as this has been identified as being appropriate to address environmental effects.
Taihape	Compliant	-	-
Bulls	Compliant	-	-
Mangaweka	Compliant	-	-
Ratana	Not assessed	Abstraction rate monitoring not in place at existing bore. Consent to use new bore for production has been acquired.	Design and construction of treatment plant underway. Plant operation not expected to commence until 2017.
Erewhon Rural	Compliant	-	-
Hunterville Rural	Compliant	-	-
Omatane Rural	Compliant	-	-

3 Wastewater

3.1 Compliance against consents is shown per wastewater treatment plant (WWTP) in the table below.

Table 2: Consent Compliance – Wastewater Treatment Plants

Scheme	Compliance February 2017	Comments	Actions
Marton	Non-Compliant	The downstream samples show BOD outside of the compliance limit at 3 g/m^3. Turbidity is also slightly over the compliance limit in the downstream sample at 21.6. NTU. Ammonia levels remain within the compliance limit.	Need to coordinate with Marton WWTP Focus Group to discuss issues.
Taihape	Non-compliant	Non-compliant with respect to flow volume and rate during occasions in February 2017. Non-compliant with respect to DRP in the downstream sample.	A compliance pathway for this treatment plant has been agreed with Horizons Regulatory Manager. Reporting requirements from this agreement are included as appendix to this report.
Bulls	Not Assessed	A consent renewal application has been lodged with Horizons, and responses have been supplied to all Horizons requests for further information	On 22 November Horizons advised RDC staff that they are still unable to provide a on their intended approach and timeframes for processing this consent. No progress since this time.
Mangaweka	Compliant	-	-

Scheme	Compliance February 2017	Comments	Actions
Hunterville	Non-compliant	Regular exceedances of the maximum daily discharge volume have been recorded in February 2017. However despite the above, ongoing RDC ecological monitoring upstream and downstream of the Wastewater treatment Plant continues to demonstrate no adverse effects.	A draft consent variation was lodged on 1 December 2016 in order that the consent will reflect the accurate maximum daily discharge volume. This action is part of the compliance pathway for this treatment plant that has been agreed with Horizons Regulatory Manager. Reporting requirements from this agreement are included as appendix to this report.
Ratana	Compliant	Compliant for February 2017 based on quarterly sample taken in December 2016. Next sample to be taken later in March 2017. End of period statistics show that numerical standards that apply to five RDC effluent sampling parameters have been achieved.	-
Koitiata	Compliant	-	-

4 Recommendation

4.1 That the memorandum 'Consent compliance – February 2017' be received.

Hamish Waugh
General Manager Infrastructure

Appendix 1

Appendix – Hunterville and Taihape WWTP Agreed Compliance Pathway Progress Reporting

Purpose

This appendix reports RDC's progress against the compliance pathway agreed with Horizons Regional Council for Hunterville and Taihape Wastewater Treatment Plants, and as set out in the letter delivered by Ross McNeil to Michael McCartney at the Horizons Environment Committee Meeting of 11 May 2016.

It has been agreed that monthly progress reports will continue to be provided to Greg Bevin, Horizons Regulatory Manager.

Progress for Reporting Period 1 February 2017 to 1 March 2017

Progress for the reporting period is set out in Table 3.

Table 3: Progress for Reporting Period 1 February 2017 to 1 March 2017

Horizons Requested Progress Reporting Categories	Hunterville Wastewater Treatment Plant	Taihape Wastewater Treatment Plant
Actions completed in reporting period	A high level meeting between RDC and Horizons took place in late February.	A high level meeting between RDC and Horizons took place in late February.
Planned Actions for the next reporting period	Since installation of the clarifier on 1 November, fine tuning of the operation of the clarifier continues.	Fine tuning of the operation of the clarifier and collection of preliminary data continues.
Issues confronted/identified	No issues to report at the present time.	The agreement with Horizons was for the clarifier to be operating long enough to allow intensive environmental monitoring to occur. Due to delays, as reported previously, the winter sampling period has been missed.
Timeframes for resolving issues confronted/identified	No issues to report at the present time.	RDC have committed to lodging a draft application on 1 March 2017, but it has been agreed with Horizons that additional data will be necessary to proceed with confidence on a suite of conditions of consent that can both be fully complied with, while appropriately managing any actual and potential environmental effects. It has been agreed with Horizons that RDC will continue to monitor both plant performance, and in stream effects, over the winter of 2017, with the expectation that there will be sufficient data to advance the draft application by 1 October 2017.