

I hereby give notice that an ordinary meeting of the Catchment Operations Committee will be held on:

Date: Wednesday, 9 December 2020

Time: 9.30am

Venue: Tararua Room,

Horizons Regional Council

11-15 Victoria Avenue, Palmerston North

CATCHMENT OPERATIONS COMMITTEE **AGENDA**

MEMBERSHIP

Chair Cr DB Cotton **Deputy Chair** Cr AL Benbow Councillors Cr EM Clarke

> Cr SD Ferguson Cr EB Gordon Cr FJT Gordon Cr RJ Keedwell Cr WM Kirton Cr JM Naylor Cr NJ Patrick

Cr WK Te Awe Awe Cr GJ Turkington

> **Michael McCartney Chief Executive**

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Palmerston North 4442

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for further information regarding this agenda, please contact: Julie Kennedy, 06 9522 800

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REGIONAL HOUSES	Palmerston North 11-15 Victoria Avenue	Whanganui 181 Guyton Street			
DEPOTS	Levin 120-122 Hokio Beach Rd	Taihape 243 Wairanu Rd			
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AGENDA

- 1 Welcome/Karakia
- 2 Apologies and Leave of Absence

At the close of the Agenda no apologies had been received.

Public Forums: Are designed to enable members of the public to bring matters, not on that meeting's agenda, to the attention of the local authority.

Deputations: Are designed to enable a person, group or organisation to speak to an item on the agenda of a particular meeting.

Requests for Public Forums / Deputations must be made to the meeting secretary by 12 noon on the working day before the meeting. The person applying for a Public Forum or a Deputation must provide a clear explanation for the request which is subsequently approved by the Chairperson.

Petitions: Can be presented to the local authority or any of its committees, so long as the subject matter falls within the terms of reference of the council or committee meeting being presented to.

Written notice to the Chief Executive is required at least 5 working days before the date of the meeting. Petitions must contain at least 20 signatures and consist of fewer than 150 words (not including signatories).

Further information is available by phoning 0508 800 800.

4 Supplementary Items

To consider, and if thought fit, to pass a resolution to permit the Committee/Council to consider any further items relating to items following below which do not appear on the Order Paper of this meeting and/or the meeting to be held with the public excluded.

Such resolution is required to be made pursuant to Section 46A(7) of the Local Government Official Information and Meetings Act 1987 (as amended), and the Chairperson must advise:

- (i) The reason why the item was not on the Order Paper, and
- (ii) The reason why the discussion of this item cannot be delayed until a subsequent meeting.

5 Members' Conflict of Interest

Members are reminded of their obligation to declare any conflicts of interest they might have in respect of the items on this Agenda.



Minutes of the fourth meeting of the eleventh triennium of the Catchment Operations Committee held at 9.30am on Wednesday 9 September 2020, in the Tararua Room, Horizons Regional Council, 11-15 Victoria Avenue, Palmerston North.

PRESENT Crs DB Cotton (Chair), AL Benbow, EM Clarke, SD Ferguson,

EB Gordon, FJT Gordon (via audio visual link), RJ Keedwell, WM Kirton, JM Naylor, NJ Patrick (via audio visual link), WK Te Awe

Awe, and GJ Turkington

IN ATTENDANCE Chief Executive Mr M McCartney

Committee Secretary Mrs KE Booth

ALSO PRESENT At various times during the meeting:

Mr R Strong (Group Manager River Management), Dr J Roygard (Group Manager Natural Resources & Partnerships), Mr G Cooper (Manager Land & Partnerships), Mr J Bell (Investigations & Design Manager), Mr K Russell (Operations Manager), Mrs C Hesselin (Senior Communications Manager), Mr G Shirley (Group Manager Information & Regulatory), Mr T Bowen (Principal Advisor), Ms S Carswell (Coordinator District Advice), Mr W Spencer (Area

Engineer),

Via audio visual link:

Ms J Jung (Design Engineer-Investigations & Design), Mr J McCarten (Senior Design Engineer), Prof Bruce Glavovic (EQC Chair in Natural Hazards Planning), Dr Martin Garcia (Massey University), Mr H Smith

(Tonkin & Taylor Ltd).

The Chair welcomed everyone to the meeting and invited Cr Te Awe Awe to say a Karakia.

APOLOGIES

There were no apologies.

PUBLIC FORUMS / DEPUTATIONS / PETITIONS

There were no requests for public speaking rights.

SUPPLEMENTARY ITEMS

There were no supplementary items to be considered.

MEMBERS' CONFLICTS OF INTEREST

There were no conflicts of interest declared.

CONFIRMATION OF MINUTES

COP 20-24 Moved Turkington/Te Awe Awe

That the Committee:

confirms the minutes of the Catchment Operations Committee meeting held on 10 June 2020 as a correct record, and notes that the recommendations were adopted by the Council on 23 June 2020.

CARRIED



RIVER AND DRAINAGE ENGINEERING REPORT

Report No 20-124

Mr Strong (Group Manager River Management) reported on progress with river and drainage activities for the period June to August 2020. A powerpoint presentation was shown which illustrated items covered in the report.

COP 20-25 Moved

B Gordon/Kirton

That the Committee recommends that Council:

- a. receives the information contained in Report No. 20-124.
- b. approves the cost share change for the Pohangina-Oroua as it relates to bank protection work from 60:40 landowner-scheme to 50:50.

CARRIED

PRESENTATION: DEVELOPMENT OF AN ANZAC PARADE FLOOD RESILIENCE STRATEGY Report No 20-126

Massey University Professor and EQC Chair in Natural Hazards Planning Bruce Glavovic and post-doctoral fellow Dr Martin Garcia, guided Members through a presentation on the development of a resilience strategy for the part of Anzac Parade in Whanganui exposed to Whanganui River flooding.

COP 20-26

Moved

Patrick/Cotton

That the Committee recommends that Council:

a. receives the information presented in the Development of an Anzac Parade Flood Resilience Strategy.

CARRIED

PRESENTATION: MANAWATU DRAINAGE NETWORK INVESTIGATIONS

Report No 20-125

Mr Bell (Investigations & Design Manager, Horizons Regional Council) introduced Mr Hamish Smith, Water Resources Engineer with Tonkin & Taylor Ltd who took Members through a presentation on a Flood Hazard Model for the Manawatu Drainage Scheme, which would become a useful tool for Horizons.

COP 20-27

Moved

B Gordon/Ferguson

That the Committee recommends that Council:

a. receives the information in the Manawatu Drainage Network Investigations presentation.

CARRIED



IHURAUA SCHEME RESERVES

Report No 20-127

Mr Strong (Group Manager River Management) sought approval of the Committee to transfer the Ihuraua Scheme reserve balance to the Ihuraua / Tiraumea Catchment Group.

COP 20-28 Moved

Benbow/Cotton

That the Committee recommends that Council:

- a. receives the information contained in Report No. 20-127 and Annex.
- b. approves the transfer of the Ihuraua Scheme reserves balance of \$3,522 to the Ihuraua / Tiraumea Catchment Group;
- c. approves the transfer of the outstanding Eastern Manawatu Scheme reserve balance of \$2,845 to the Tararua district-wide Scheme.

CARRIED

TE PUWAHA PROJECT UPDATE

Report No 20-128

Mr Strong (Group Manager River Management) summarised the report, and explained the request for funding to provide for a Project Director, and the application of the principles of Tupua Te Kawa.

COP 20-29 Moved

Patrick/Cotton

That the Committee recommends that Council:

- a. receives the information contained in Report No. 20-128.
- b. delegates to the Chief Executive the authorisation to enter into a funding agreement between Horizons, Ngā Tāngata Tiaki and Whanganui District Council that provides for both a Project Director and that allows Ngā Tāngata Tiaki to fulfil its statutory function as defined by the 2017 Te Awa Tupua (Whanganui River Claims Settlement) Act.

CARRIED

MATARAWA STREAM FLOODWATER DIVERSION

Report No 20-129

Mr Strong (Group Manager River Management) updated Members on the technical work that had been undertaken which concluded a complete rebuild of the structure was warranted. Members agreed this should be considered for Council's 2021 Long-term Plan update. It was noted that no engagement had yet been undertaken with Te Awa Tupua and the recommendation was amended to include this engagement.

COP 20-30 Moved

Patrick/Keedwell

That the Committee recommends that Council:

- a. receives the information contained in Report No. 20-129 and Annexes.
- b. endorses the replacement of the Matarawa Stream diversion structure for consideration as part of Council's 2021 Long-term Plan (LTP) update, subject to engagement with Te Awa Tupua.

CARRIED



The meeting adjourned at 11.26am.

The meeting reconvened at 11.42am.

LAND MANAGEMENT PROGRESS REPORT

Report No 20-130

Dr Roygard (Group Manager Natural Resources & Partnerships) and Mr Cooper (Manager Land & Partnerships) summarised the report which was in two parts. It covered work carried out by the Natural Resources and Partnership-Land team for the 2019-20 financial year. It also provided an update on progress for the period 1 July to 15 August 2020 including the 2021 targets for annual plan and contracts, SLUI grant works, and Regional Land and Coast and WCS grant works.

COP 20-31 Moved

Te Awe Awe/Turkington

That the Committee recommends that Council:

a. receives the information contained in Report No. 20-130 and Annex.

CARRIED

PROCEDURAL MOTION TO EXCLUDE THE PUBLIC

COP 20-32 Moved

B Gordon/Ferguson

THAT the public be excluded from the following part(s) of the proceedings of this meeting. The general subject of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter, and the specific grounds under section 48(1) of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution follows.

This resolution is made in reliance on section 48(1)(a) of the Local Government Official Information and Meetings Act 1987 and the particular interest or interests protected by section 6 and section 7 of that Act which would be prejudiced by the holding of the whole or relevant part of the proceedings of the meeting in public, as follows:

CARRIED

PX1 Confirmation of Public s7(2)(h) - the withholding of the Excluded Meeting held on information is necessary to see the the level outbook of the public conduction.	r section 48(1) of this resolution
enable the local authority to carry out, without prejudice or disadvantage, commercial activities. The public contact the meeting would result in the disclosinformation for what reason for withhold under section 7.	uld be likely to closure of which good olding exists

PX2

Council / Committee to consider whether any item in the Public Excluded minutes can be moved into the public domain and define the extent of the release



The meeting adjourned to the Public Excluded part of the meeting at 12.23pm.

CONFIRMATION OF PUBLIC EXCLUDED MEETING HELD ON 10 JUNE 2020

PX COP 20-8 Moved

Te Awe Awe/Benbow

That the minutes of the confidential part of the Catchment Operations Committee meeting held on 10 June 2020, as circulated, be confirmed as a correct record.

CARRIED

It was noted that it was Cr Patrick who attended via audio-visual link, and not Cr Te Awe Awe.

PX COP 20-9	Moved That the Committee moves CARRIED	Keedwell/Benbow/ s out of Public Excluded.
The Public Exclu	ded section of the meeting	concluded at 12.28pm.
The meeting clos	ed at 12.29pm.	
Confirmed		
CHAIR	<u> </u>	GROUP MANAGER RIVER MANAGEMENT

GROUP MANAGER NATURAL RESOURCES AND PARTNERSHIP



Report No.	20-178
Decision Required	

RIVER AND DRAINAGE ENGINEERING REPORT

1. PURPOSE

1.1. The purpose of this item is to report on progress with river and drainage activities for the period September - November 2020.

2. RECOMMENDATION

That the Committee recommends that Council:

a. receives the information contained in Report No. 20-178.

3. FINANCIAL IMPACT

3.1. Funding provision for all activities reported on in this item is either included in the River and Drainage General or River and Drainage Schemes Activity sections of the 2018-28 Long-term Plan (LTP); is covered by an approved carry-forward of unexpended budget from the 2019-20 financial year; or additional approval will be specifically sought by way of recommendation in the item.

4. SIGNIFICANT BUSINESS RISK IMPACT

4.1. There are no significant risks relating to the adoption of the recommendations contained in this report.

5. CLIMATE CHANGE IMPACTS

5.1. While this item doesn't specifically consider climate change impacts clearly climate change is a significant influence for the activity as a whole, reflected in the fact that the current 30 year Infrastructure Strategy highlights climate change as a significant issue.

6. DISCUSSION

- 6.1. Continuing the theme with the September report, central government funding of some key river management resilience projects continues to have considerable focus within the group. The Chief Executive signed a funding agreement with the Ministry for Business Innovation and Employment on 3 November for a total of \$24.9M of funding; expectation is that by the time Committee meets the Hon Stuart Nash (Minister for Economic and Regional Development) will have signed on behalf of central government.
- 6.2. Key drivers with that funding (termed shovel ready funding and part of central government's response to the economic effects of the COVID-19 national lockdown) are job creation and rapid mobilization. The November meeting of Council's Audit, Risk and Investment Committee considered amongst other things an item outlining a strategy for expediting the delivery of those projects; the themes in that item are very much the focus for staff in gearing up to deliver these projects.



- 6.3. In part related to those shovel ready projects, community engagement has also been a focus over the period. That's included Scheme Liaison Group meetings, inviting Whirokino Scheme ratepayers to a briefing on the Foxton Flood Mitigation project and two meetings that form the start of the ratepayer engagement around the development of a management strategy for the Rangitikei Scheme. Those meetings have been variously attended by the Council Chair and Councillors Cotton, Benbow, Clarke, Ferguson, Patrick and Turkington.
- 6.4. Staff met with the Palmerston North City Council (PNCC) Parks and Reserves Manager Kathy Dever-Tod in late September to traverse a range of overlapping issues, including progressing the shared path development along the margin of the Manawatu River between Palmerston North and Ashhurst. The section of path that has been constructed downstream of the State Highway 3 Bridge has been very beneficial for staff in permitting access for river maintenance with staff signaling an interest in working together with PNCC to progress the wider project.
- 6.5. As previously flagged to members (Report 19-89 presented to the June 2019 meeting), the reset some years ago of management practices as they relate to gravel extraction over this reach of the Manawatu are beginning to bear fruit with a clear recovery in bed levels and the river returning to a more natural form. This is also beginning to generate more management issues with access becoming increasingly problematic; a shared path would be very beneficial in that regard.
- 6.6. The period has seen considerable focus within the group and across the organisation on the LTP and accordingly attention has turned to the schedule of scheme meetings intended to coincide with LTP consultation in 2021. Particular focus is on those things we could look to improve on, particularly how we make the information presented available to those not able to attend in person (use of video-conference, placement of presentations on Council's website etc.).
- 6.7. Staff are also conscious of the wide array of policy directives emanating from central government and other funded projects such as Jobs for Nature, and the potential impacts on scheme ratepayers; the intent is to have a broader representation of staff present at these meetings to answer questions, without making the organising too onerous or diluting the focus. That collaborative theme is evident through the report with the large number of projects being advanced with both the science and freshwater teams.
- 6.8. Staff capability / capacity has been significantly boosted over the period with some key appointments. Those include Cliff Thomas to the position of Area Engineer Central and Bill Hewitt to the role of Project Delivery Team Leader, key focus being Shovel Ready project delivery. Senior Engineering Officer Dougal Ross has also returned to the Northern Team after a 12 month lifestyle leave break, improving our ability to deliver both the Lower Whanganui and Rangitikei capital projects.
- 6.9. Related to that, key equipment purchases have taken place over the period, with Kairanga staff welcoming the purchase of a new 13 tonne excavator. Kairanga staff will also take delivery of a new truck early in the new calendar year, both items replacing equipment that has served Horizons well.

7. INVESTIGATIONS AND DESIGN

- 7.1. During this reporting period the Investigations and Design Team has grown its capacity around project management to deliver capital projects for the River Management Group, particularly the 'Shovel Ready' projects.
- 7.2. Andrew Williams has joined the team as a Project Engineer on secondment from the Central Area Team and Rachel Pinny has also joined the team as the Projects Administrator. Recruitment for a Projects Team Leader has been undertaken successfully with Bill Hewitt joining the team in early December. Bill brings with him a wide range of



- project management experience both in the private sector as well as within local government in New Zealand.
- 7.3. The following summarises the work that the team has undertaken during this reporting period.

ARAWHATA STREAM AND HOKIO DRAINAGE NETWORK STUDY

- 7.4. This project is looking at the Hokio Drainage network with a view to both increasing the level of service as well as seeking opportunities to reduce the sediment load in the drains that eventually flow into Lake Horowhenua.
- 7.5. The Horizons Team working on this project has been made up of staff from the Investigations and Design Team and the Southern Area Team, as well as from the Science and Innovation Team.
- 7.6. During this reporting period consultants Tonkin and Taylor have continued to progress their technical work with a draft of their findings due to be delivered at the end of November.
- 7.7. Within this space, work has also been undertaken alongside the consultants who are progressing detailed work around the Arawhata sediment trap that is being undertaken as part of the Jobs for Nature package of works.

KOPUTAROA SCHEME REVIEW

- 7.8. The review of the Koputaroa Scheme is a significant piece of work, as it seeks to understand the multiple issues and drivers that will shape the Scheme's operations and management well into the future.
- 7.9. Work on this review has continued throughout this reporting period, and staff are now focusing on bringing together the conclusions to shape the recommendations around the future management of the Scheme.
- 7.10. To assist with the understanding of the Scheme, as well as developing options for future management, staff have developed a number of hydraulic models of the Koputaroa Stream and associated drainage channels.

FLUVIAL PROGRAMME - OHAU GRAVEL RESOURCE STUDY

- 7.11. The fluvial programme looks at the gravel resource throughout the Region's Rivers and is undertaken in collaborating with the Science and Innovation, Environmental Data, and Survey Teams.
- 7.12. During this reporting period staff, alongside consultant Gary Williams, have been looking closely at the gravel resource of the Ohau River with a view to shaping up a Gravel Management Strategy for the river.
- 7.13. Work has focused on considering and quantifying changes in the gravel resource over time, as well as seeking to understand the fluvial geomorphic processes that shape the river. It is intended that this information will be discussed with Iwi with a view to shaping the strategic management of the gravel resource in the Ohau.

ASSET MANAGEMENT

- 7.14. Over this reporting period a lot of work has been undertaken in the Asset Management space. This work has included the refresh of Asset Management Plans for each of the Schemes, a component of the LTP update.
- 7.15. In addition to this staff have begun to look at the risk profiles for each of the Schemes, to inform decisions around appropriate levels of insurance and reserves that the Schemes should carry. This work supports the work that the Corporate Services Team has been undertaking around management of Council's insurance premiums through the LTP.
- 7.16. Staff have also continued working as part of an Asset Management Leadership Team across the organisation to develop a Strategic Asset Management Plan, as well as rolling



- out the new Asset Management Information System (AMIS) across the River Management Group as well as the wider organisation.
- 7.17. During this reporting period, a significant draw on staff time has been working with Audit New Zealand around the revaluation of the infrastructural assets required for the Annual Report.

REGULATORY ADVICE

7.18. During this reporting period, advice was provided on a number of substantive matters. This regulatory work has included specialist advice on flood risk and the production of technical reports for consent applications, rezoning and subdivisions.

SHOVEL READY PROJECTS

- 7.19. During this reporting period the team has been working to ensure that these projects are delivered as efficiently as possible. Staff have begun the procurement processes associated with setting up supplier panels for both contractors and consultants who can assist with the delivery of the projects.
- 7.20. The Foxton Project has been a particular focus for the team. Consultants E2 Environmental are progressing the detailed design with staff looking to appoint a resource management consultant to provide support in regards to the preparation of applications for the various resource consents that some of the work will require.

LOWER MANAWATU SCHEME RURAL FLOOD PROTECTION UPGRADE PROJECT

- 7.21. During this reporting period, staff have been working to ensure that works that were suspended by the COVID-19 shutdown can be re-started once the summer construction period begins.
- 7.22. A tender process has been undertaken and a contractor appointed to undertake works to extend the height of the Burkes Gates. Additionally works to complete stopbank raising along Kara Creek, as well as providing protection to two individual properties in the Taonui Basin, are also being progressed.

8. CENTRAL AREA

- 8.1. This reporting period has seen an increase in rainfall for this reporting period compared to the last reporting period effectively a doubling of rainfall. The underlying dry nature of 2020 and the nature of the rainfall events meant that only modest peak flows were generated in the Manawatu.
- 8.2. Staff changes for the Central Area include Thomas Morgans replacing Warren Kimura who has retired; Cameron Reid promoted to Engineering Officer replacing Andy Williams who was seconded to the 'Projects' group; and Cliff Thomas taking the Area Engineer Central position with the departure of Paul Joseph.
- 8.3. Staff have continued to work closely with Horizons' Biodiversity Team to respond to the recent discovery of alligator weed in the Mangaone Stream and City tributaries. There has also been a recent discovery and removal of one site of Sagittaria weed, also in the Mangaone Stream. Inspections, monitoring and removal efforts for both are ongoing.

LOWER MANAWATU SCHEME

8.4. Works undertaken on the various rivers within the Scheme this period include the following:

MANAWATU RIVER

8.5. Progress is being made on the project to address the impacts of gravel build-up / beach development on the alignment of the Manawatū River between Palmerston North City and Ashhurst. Several beaches required excavation of 'high flow' channels to help in times of



- floods. It is intended to provide governance with an outline of the plan once developed, as this will be a key milestone in the management of this reach of the Manawatu.
- 8.6. Approximately 6km of vegetation mulching and layering have been completed across various sites along the Manawatū this period. Minor erosion repairs, pest plant removal, willow pole planting and a short section of drain clearing was also undertaken in the vicinity.
- 8.7. Works were completed at the upper reach of the Scheme, in the vicinity of the Ashhurst Domain and the confluence of the Pohangina River with the Manawatū River. These works included the 'topping up' of one of the existing rock groynes; constructing new tree groynes; and the planting of further willows for future erosion protection. The river protection works that continue to be damaged by four wheel drive enthusiasts and determined fly-tippers will also be repaired when required.
- 8.8. The work is focused on ensuring that the works completed adjacent to Ashhurst Domain are not outflanked further upstream, likely to be an ongoing battle particularly with the Manawatu now having a relatively fixed alignment as it exits the gorge.
- 8.9. The Fitzroy Bend Groynes were cleared of debris in October. Debris will be left to dry and if weather permits is planned to be burned before Christmas.
- 8.10. The pumps at both Heatley Avenue and Waterloo Park pump stations within the City have been removed, serviced, repaired and reinstalled. These pumps service the toe drains that run along the land side of the stopbanks in these areas.
- 8.11. Staff have continued to monitor, meet and work with PNCC across various projects this reporting period. These included the new Esplanade entrance, including the removal of large eucalyptus trees from the stopbank toe; progressing the river pathway extension upstream of Riverside Drive; native plantings of tributaries; and the now annual spring bonfire event held at Ahimate Park.
- 8.12. PNCC have begun design and consultation around the development of the Marae Tararta area, previously used as a gravel extraction site near the transfer station at Awapuni, with staff involved in workshops and design discussions. Layering of willows is currently being undertaken around the Marae Tararta site, and the contractor has recovered and relocated suitable native logs to Rangitāne.
- 8.13. Scheme staff met with Massey University property services staff to discuss several issues and ideas, one such being the reshaping of a drain at the toe of the terrace adjacent to the stopbank, to enable the area to be planted as a wetland. Also discussed was the possible rectification of river berm adjacent to the stopbank currently unable to be grazed. Staff agreed that the Scheme could assist with improving the site overall, and will work with Massey to do this.
- 8.14. Two separate complaints were received about the concrete riprap protection in the vicinity of the Foxton Beach Boat Club. One regarded stray concrete across the mudflats causing a nuisance to boaters; and the second alerting to plastic from old bank protection works was breaking down and releasing plastic into the estuary. The erosion area was repaired with additional riprap, and where possible, stray concrete was collected. A long term solution for this area is needed as the toe of the stopbank remains exposed.
- 8.15. New Zealand Transport Agency (NZTA) staff and consultants have approached staff for views around the retention of the old Manawatu River Bridge at Whirokino whether that is likely to cause an operational issue. The staff view is that this is unlikely to be an issue provided maintenance roles and responsibilities are clearly identified; the old structure has a lower deck level and more supporting piers than the new bridge and therefore collects a greater volume of vegetative debris when the river is in flood.



OROUA RIVER

- 8.16. Although not a statutory requirement, staff have been providing representatives from Ngati Kauwhata with planned maintenance work for the Oroua River. Concerns have been raised around willow control work along the awa upstream of Te Arakura Road staff have arranged to meet with Kauwhata on site to work through those concerns.
- 8.17. Vegetation clearance and disposal has been undertaken at several sites. Work was carried out at Timona Park in partnership with Manawatu District Council as part of the 'Windows to the Oroua' project. Native plants have been planted in the cleared areas.
- 8.18. Several sections of mulching and layering have been completed through Feilding. This work has sparked interest from the community, with many calls being fielded in regards to the removal or layering of trees. The calls were more of a curious nature as to the purpose of the work.
- 8.19. The preliminary work for this year's silt relocation contract is underway. Discussions are currently happening with a land owner, and an initial survey has been undertaken. This work is likely to commence early February 2021.

LOWER KIWITEA STREAM SCHEME

8.20. Maintenance works commenced in the Kiwitea Stream during November. Works included the constructions of groynes; the clearing of flood debris from beaches; the layering and / or mulching of existing willows; and the relocating of gravel beach build-ups causing erosion problems.

9. NORTHERN AREA

RANGITIKEI RIVER CONTROL SCHEME

- 9.1. As part of the development of a management strategy for the Rangitikei Scheme, meetings were held with landowners / targeted rate payers (direct benefit) on 17 and 19 November at the new Te Matapihi Centre in Bulls. A more detailed overview of the strategy development and those meetings is provided as a separate item.
- 9.2. Following a repair to the fish friendly floodgate winch that drains Ellison Reserve in Tangimoana, we are working with Biodiversity and Freshwater Staff to fence off the floodgate outlet to the estuary from cattle. This will benefit the reserve and the damage from cattle to the drain.
- 9.3. The notification period associated with the Rangitikei aerial spray consent closed 26 October; staff are currently awaiting further direction from Regulatory Staff on next steps. Staff have also lodged a resource consent application for gravel management downstream of the Kakariki.
- 9.4. A contract has been let for the final stage of the Parewanui stopbank upgrade with work expected to commence shortly.

POHANGINA-OROUA RIVER CONTROL SCHEME

- 9.5. Scheme work for the year is ramping up as ground and access conditions improve. Noting that normal channel maintenance work is funded 100% from scheme rates while river bank erosion work is being undertaken at the request of the property owner, funded at the new rate of 50% by the landowner and 50% by the scheme.
- 9.6. At Totara Reserve an extensive erosion repair job at Gilcrest Track has been completed. This will go a long way to help protect the large and well-established Totara trees at this location. In addition approximately 1500 willow poles have been planted in front of the repair and a large volume of gravel has been redistributed to allow the river to flow further out in the channel, thus protecting this area.



UPPER WHANGANUI RIVER MANAGEMENT SCHEME

- 9.7. As a follow-up to the September meeting, staff have been working with Ruapehu District Council (RuDC) staff to complete fencing of the four grazed river berm areas along the right bank through Taumarunui. This area is managed jointly between the two Councils with "Right to Graze" leases issued to grazers following public advertisement.
- 9.8. These agreements do not bring in any income to Council as the land is identified as "Hydro Parcel" and so not able to be rented. However the free grazing rights do keep the land tidy and the weeds under control. The fencing of one area was completed in the previous financial year and a joint funding application between RuDC, River Management and Freshwater is currently being finalized for another area this financial year.

MATARAWA FLOOD CONTROL SCHEME

9.9. A pamphlet is being developed to drop in residential letterboxes to remind past and new property owners of the purpose of the scheme and how we can assist with the likes of channel clearance.

MAKIRIKIRI FLOOD CONTROL SCHEME

9.10. A meeting with the Mangatikotoko Dam landowner was held in October to review the Comprehensive Dam Safety Review (CDSR) completed and talk through planned works on the dam in the New Year.

WHANGAEHU - MANGAWHERO RIVER MANAGEMENT SCHEME

9.11. A Liaison Group meeting was held in Whanganui on 4 November.

LOWER WHANGANUI SCHEME

9.12. Work continues to progress with the Port Revitalisation / Te Puwaha project, working through a co-design / co-decision process with Te Mata Puau in accordance with the 2017 Te Awa Tupua statute.

RUAPEHU DISTRICT WIDE SCHEME

9.13. Staff met with representatives from Ngati Haua, Ngati Maniapoto and Ngati Tuwharetoa to advance a more collaborative management model that aligns with the values contained in the 2017 Te Awa Tupua statute.

EASTERN AREA

EASTERN AREA GENERAL

- 9.14. September, October and November have experienced some larger rainfall events than the preceding months, which have been focused on the Eastern Tararua and Puketoi ranges in the Southern Tararua District (in the head waters of the Mangatainoka, Tiraumea and Mangatoro Rivers) and the northern headwaters of the Manawatū River.
- 9.15. The Mangatainoka, particularly at its confluence with the Makakahi, reached its highest level since 2017. This has led to some significant bank erosion and channel realignment of the river between the Pukewhai Bridge at 30km and Halls Road at 8km.
- 9.16. Two global consents are currently being prepared for the Eastern Area, one to renew the Upper Manawatū Lower Mangahao Scheme gravel extraction consent, and a Tararua District wide willow removal and vegetation clearance consent. Both are in draft and are going though consultation with stakeholders currently.

TARARUA DISTRICT RIVER MANAGEMENT SCHEME

9.17. A large section of work has been completed on the Mangaroa Stream to remove vegetation and reduce flooding. Vegetation clearance work has also been completed on a



- tributary to the Mangaramarama Stream, near Pahiatua, which had been suffering from the effects of willow congestion.
- 9.18. Work is planned to begin soon in the headwaters of the Tiraumea, undertaking large scale willow removal, to improve congestion and water quality. This project is being undertaken in conjunction with Land Management staff.

SOUTH EASTERN RUAHINE SCHEME

- 9.19. The majority of work being undertaken in this period has involved vegetation clearance and channel shaping to alleviate the congestion caused by unmaintained protection planting within the scheme. The current river to be targeted is the reach of the Kumeti from Te Rehunga North Road to Top Grass Road.
- 9.20. A large renewal project is currently underway on "Hartridges Weir". This was originally a stepped weir that has had two extra "steps" added over time due to sustained scouring at the toe of the weir. To help alleviate this scouring and to make the weir more resilient, the steps are being filled in and a scour apron added so that the weir more resembles a rock fall than steps. It is hoped that this will mean less frequent maintenance and improved fish passage.

UPPER MANAWATU - LOWER MANGAHAO SCHEME

9.21. Work is underway to renew the gravel extraction consent held by Horizons, an integral element of the management of the scheme. This will be lodged with the consent authority prior to Christmas.

10. SOUTHERN AREA

MANAWATU DRAINAGE SCHEME

10.1. River Management and Freshwater Staff have been working on two fencing and planting plans for discrete sections of the Taonui Stream, excluding cattle from the waterway while preserving access for maintenance.

MAKERUA DRAINAGE SCHEME

- 10.2. This period has seen the pump stations up and running keeping staff busy with manual and machine cleaning of the weed build up at the pump station screens to ensure the pumps can operate efficiently.
- 10.3. Staff met with local landowners and representatives from the NZTA to discuss ongoing drain slumping issues along Makerua Road Drain that has occurred since the installation of the crash barriers.
- 10.4. Staff met with members of the Makerua Scheme Liaison Group to discuss end of year finances and upcoming works programs

KOPUTAROA DRAINAGE SCHEME

- 10.5. Routine inspection and maintenance identified an issue with one of the Koputaroa No. 2 pumpstation pumps high moisture levels within the pump motor. The pump has been removed for repairs and will hopefully be operational again prior to Christmas. Contingency plans have been discussed with affected landowers.
- 10.6. River Management and Science Staff are continuing to work closely on the instream values associated with the part of the network feeding the Koputaroa No.4 Pumpstation. Inspections have been scheduled for February 2021 to identify the fish species and numbers present within the catchment, investigate the current water quality throughout the network and assess culvert and fish friendly floodgates to maximize fish passage throughout the network.



10.7. Although anecdotal information suggests rates are relatively low, staff have also installed nets on the outlet of the Koputaroa No.4 Pumpstation to monitor and record potential fish mortality as a result of the pump station operation. This is the first time such an assessment has been carried out on a Horizons pump station.

TE KAWAU DRAINAGE SCHEME

10.8. River Management and Freshwater Staff have been working on a planting plan for Johnston's drain. Planting of Johnston's drain is to improve water quality through shading, reduction of sediment and to introduce habitat for aquatic life.

11. ENVIRONMENTAL GRANT WORKS AND ENGINEERING ADVICE

- 11.1. Eastern Team had no new environmental grant applications received over the period. One outstanding environmental grant for the Tapuata Stream in urban Dannevirke has been completed with the construction of a rock lining on the outer bend of the stream, upstream from the Victoria Avenue Bridge.
- 11.2. Hilton Shane Tapuata; Construction of a limestone rock lining for bank and house foundation protection. Work onsite was completed in August.
- 11.3. Northern Team had one request for environmental grant funding during the reporting period. This is combined between adjoining landowners on the Kiwitea Stream.



2020 - 2021 Environmental Grant work

Name	River or Stream	Job No.	Type of work	Work status	Estimated work cost (\$)	Value of grant (\$)
Cvitanovech	Makiriki	IN	Tree work groynes	Approved	\$14,000	\$4,200
Te Rongaroa Marae	Ongarue	IN	Rock Lining, Layering Planting & Earth works	Approved – On Hold	\$35,354	\$10,606
Palmer	Okahukura Saddle Rd	IN	Vege clearance	Application being prepared	\$23,250	\$6,975
Blue Mountain Adventure Centre	Piopiotea Stream	IN	Rock Lining	On Hold		
Friends of Taihape	Hautapu River	IN	Willow Clearance	On Hold	\$7,148	\$2,144
Segura – Tuatahi Property	Pungapunga	IN	Bank Protection, Gravel Mgmt	On Hold	\$18,885	\$5,665
McKay & Larsen	Kiwitea	IN	Bank Protection	Application being prepared		
Hilton Shane	Tapuata Stream	IN1513	Rock Lining	Complete	\$4600	\$1380

12. SIGNIFICANCE

12.1. This is not a significant decision according to the Council's Policy on Significance and Engagement.

Ramon Strong
GROUP MANAGER RIVER MANAGEMENT

ANNEXES

There are no attachments to this report.



Report No.	20-179
Information Only - No De	ecision Required

LOWER MANAWATU SCHEME O&M MANUAL

1. PURPOSE

1.1. The purpose of this item is to provide members with an update on the development of an Operations, Maintenance and Surveillance Manual for the Lower Manawatu Scheme.

2. EXECUTIVE SUMMARY

- 2.1. The current 2018 2028 Long-term Plan (LTP) commits, amongst other things, to the development of an Operations, Maintenance and Surveillance Manual (O,M&S Manual) for the Lower Manawatu Scheme (LMS). The drivers for this initiative are many and varied the complexities of the LMS, the increasing importance of capturing institutional knowledge with impending/ recent staff retirements, the pressures that climate change will exert, to name a few.
- 2.2. There is also an apparent resourcing deficit with the LMS and with the many and varied pressures on the operating budget, the initiative, in parallel with the significant advances in organisational asset management systems / practices, provides an opportunity for the first time to systematically determine the Full-time Equivalent staff (FTE) requirement as it relates to LMS inspection and maintenance activities.
- 2.3. The scale of the task has proved challenging particularly as there are no known equivalents nationally. It has, however, due to a range of factors, now gained some critical mass. Although the full document is not quite at a point where it can be presented to this meeting a glimpse in the form of the table of contents is provided to members.

3. RECOMMENDATION

That the Committee recommends that Council:

a. receives the information contained in Report No. 20-179 and Annex.

4. FINANCIAL IMPACT

4.1. There is a relatively small financial impact for both the River and Drainage General and LMS (current Revenue and Financing Policy identifies this work as being equally split between the two) budgets related to this item; resource pressures mean that the budget for this work lies in a previous financial year. The scale of input required is also larger than what was envisaged when 2018 LTP budgets were set. Costs for this work will be placed against the respective cost centres with a draw on reserves if required (where the relevant unexpended portion of the budget from the previous financial year has dropped into).

5. COMMUNITY ENGAGEMENT

5.1. This initiative formed part of the 2018 LTP process with updates provided to Scheme meetings. Although not confidential as such the document is written as a reference document for staff and is not intended to be provided to the public. Communications staff are continuing to work on an information sheet for the LMS.



6. SIGNIFICANT BUSINESS RISK IMPACT

6.1. Arguably the O,M&S Manual addresses the most significant business risk (taking a long-term view) for Horizons – catastrophic failure of our largest River Management Scheme, the Lower Manawatu Scheme. The document is a significant mitigation measure, gathering together key technical and operational information from disparate sources and capturing institutional knowledge, tangibly reducing the future risk of stopbank network failure.

7. CLIMATE IMPACT STATEMENT

7.1. As noted previously to members a key component of scheme response to the impacts of climate change is the focus on resilience. This initiative has a direct positive impact in that regard – the value of collating technical and operational knowledge and making it easily accessible.

8. BACKGROUND

- 8.1. Horizons' Lower Manawatu Scheme is a very complex flood protection scheme that protects large parts of the Manawatu and Horowhenua. It is likely to be (personal opinion) the largest flood protection scheme in New Zealand by asset value, encompassing a diverse range of operating contexts.
- 8.2. Like any river management scheme it hasn't been designed and built from a single, perfect blueprint; it has its origins with early European settlement, through the Manawatu Catchment Board to its present day form with Horizons as custodian. It has been modified and added to over time, with large flood events particular catalysts for evolution and development.
- 8.3. The essence / subtleties of the scheme don't readily lend themselves to documenting, and for new staff in particular there is a bewildering array of different sources of information around how it works and particular issues to keep an eye on. Staff continuity has provided a degree of risk mitigation in the past but an aging workforce, societal changes and a more transient workforce mean that particular mitigation measure is becoming less effective.

9. DISCUSSION

- 9.1. The project seeks to distil all of those information sources into a single, definitive source of information. The document is based on information recorded by now retired (2016) Senior Design Engineer Graham Doull who (as he neared retirement) was charged with producing a document that outlined the technical basis for the scheme. Previous Group Manager Operations Allan Cook has added to that document; Jennifer Fox from Timaru-based consultants Waugh Asset Management is tasked with producing the final document.
- 9.2. As the name suggests the intent with the document (in addition to scheme background / development) is to capture both how the scheme operates and a complete list of inspection and maintenance activities. As noted on a number of occasions (e.g. the item to the March 2020 Committee meeting on the Fitzroy Bend secondary stopbank) a qualitative assessment suggests insufficient resource to adequately cover all of the inspection and maintenance activities. The initial drafts of the 2021 LTP include additional resourcing but the O,M&S Manual looks to more systematically tally the FTE requirement associated with all the inspection and maintenance tasks.
- 9.3. Manuals of this type are not common practise but are a significant issue for the sector. The format in part follows the intent of the dam safety guidelines, particularly the flood surveillance component (prioritising the information to be captured and monitoring required in a flood event). It's intended to encompass all operational requirements including those that currently reside in the Emergency Response Manual.

9.4. The document has not quite evolved to the point where it is in a state fit to share with members but it is fairly rapidly evolving; the appointment of Cliff Thomas to the role of Area Engineer Central and the 2021 retirement of Senior Engineering Officer Ian McMahon (with close to 40 years' experience) are timely and the confluence of those and other things has meant considerable momentum has been generated. I'm confident a complete draft can be circulated with the April meeting agenda.

10. CONSULTATION

10.1. It is intended to circulate a complete draft for comment to key ratepayers including the current Liaison Group Chair Peter Wells.

11. TIMELINE / NEXT STEPS

11.1. As noted a complete draft is intended to be included as part of the April 2021 meeting agenda.

12. SIGNIFICANCE

12.1. This is not a significant decision according to the Council's Policy on Significance and Engagement.

Ramon Strong
GROUP MANAGER RIVER MANAGEMENT

ANNEXES

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Report No.	20-180		
Information Only - No Decision Required			

RANGITIKEI MANAGEMENT STRATEGY UPDATE

1. PURPOSE

1.1. This item provides members with an update on the development of a management strategy for the Rangitikei River.

2. EXECUTIVE SUMMARY

- 2.1. The Rangitikei Scheme is the largest and most challenging river control scheme that Horizons administers, encompassing a 63km length of the Rangitikei River from the river mouth to Rewa. A number of factors prompted staff in 2019 to fundamentally reassess the management approach for the river.
- 2.2. The development of a management strategy has a number of challenging elements to it, not the least of which is the fundamental consideration around how tightly to manage the river corridor (the key sustainable management consideration) and the implications that has for adjoining landowners.
- 2.3. The timing of this initiative has proved fortuitous with the COVID-19 national lockdown and central government's subsequent initiative to drive economic stimulus through infrastructure projects; the scheme has been able to access shovel ready funding to build a greater level of resilience for the lower reach of the scheme while minimising the financial impact to ratepayers.

3. RECOMMENDATION

That the Committee recommends that Council:

a. receives the information contained in Report No. 20-180.

4. FINANCIAL IMPACT

- 4.1. The financial impacts associated with the strategy development have been partly addressed through the item to the August Council meeting around shovel ready projects and the approval of the local share component of the funding.
- 4.2. There are however two components that will need to be addressed when the strategy is finalised. The first is the progressive loss of lease revenue as the Council-owned corridor of land adjacent to the Parewanui stopbank currently leased for pastoral farming is transitioned to trees. Staff are not yet in a position to quantify what those financial impacts might be, noting that there are options for retaining some income through plantation forestry or other means.
- 4.3. The second is the upfront investment required to establish riparian margins along either side of the river. This is a particularly challenging task upstream of Kakariki and one that staff will look to map out in more detail in 2021, including how to incentivise landowners to allow protection plantings to be established on land that is currently grazed. Neither the potential loss in revenue nor the short to medium term potential for increased operational spend associated with establishing riparian margins has to date been budgeted for with the updated Long-term Plan.



5. COMMUNITY ENGAGEMENT

5.1. Community engagement with the strategy development has occurred progressively, culminating in two meetings on 17 and 19 November 2020. The Tuesday meeting was focussed on management issues / operating risks associated with the reach downstream of the Bulls Bridge – all those landowners in that area paying direct benefit targeted rates were invited to that meeting. The Thursday meeting focussed on issues upstream of the Bulls Bridge, with a similar mail out invite list.

6. SIGNIFICANT BUSINESS RISK IMPACT

6.1. As noted previously to members, arguably the issues that exist with the configuration of the scheme downstream of the Bulls Bridge constitute a significant business risk; during the June 2015 flood event a section of the Parewanui stopbank was at risk of failure due to river scour, with potentially catastrophic consequences.

7. CLIMATE IMPACT STATEMENT

7.1. As with the item related to the Lower Manawatu Scheme, the focus with the Rangitikei Strategy is about developing resilience in the face of a changing climate – the impacts that more frequent/ severe flooding will have on a scheme that is already rather fragile.

8. BACKGROUND

- 8.1. The Rangitikei River Scheme has a considerable history to it that dates back to the early years of the Rangitikei-Whanganui Catchment Board. The awa has many unique characteristics to it that make managing it challenging, reflected in the relatively large number (four) of scheme reviews that have taken place since inception.
- 8.2. A series of events has prompted the development of a strategy; the damage repair bill and the apparent fragility of the scheme with the June 2015 flood event, issues highlighted again with the prolonged period of high river flows (but no particularly large flood events) over winter 2018.
- 8.3. In the course of developing the strategy staff have done an excellent job of putting together a complete picture of the landforms / processes that have given rise to those characteristics, including the assistance of Massey University Professor of Physical Geography Ian Fuller and his team.

9. DISCUSSION

- 9.1. The key tenets of the management strategy were the subject of a workshop presentation on 28 January 2020 and accordingly the full detail of the management strategy (in its current / evolving form) is not reproduced here.
- 9.2. In essence the strategy has two key areas of focus; the apparent vulnerability of the Parewanui stopbank to breach failure due to river scour and the large scale failure of bank protection works upstream of Kakariki over the last five or so years. Both issues are, to some degree, a function of the fairly thin economics associated with managing the Rangitikei River; the scale of the management task and the limited ratepayer base to support that management approach.
- 9.3. The vulnerability of the Parewanui stopbank to breach due to river scour is a function of a poorly maintained river corridor, high suspended sediment loads and a dependence on lease income; the corridor of Horizons-owned land between the stopbank and the river corridor leased for pastoral farming.
- 9.4. The remedy at a high level is in essence to give the river more room and progressively transition the lease land into protection plantings. Those elements and other key



- considerations (public access, enhanced biodiversity) form the main elements of the shovel ready project, with central government contributing \$3.9M toward the total estimated project cost of \$5.2M. The completion timeframe for the project is 30 March 2024 but elements of the lease land use transition may run beyond that timeframe.
- 9.5. The second area of focus the sustainability of the management approach upstream of Kakariki is also one that relates to scheme income. Previous reviews identified an over-reliance on gravel extraction as a management tool, an activity that also used to generate income in the form of royalties that the scheme received.
- 9.6. Although gravel extraction is now used in a much more measured way, the legacy of past over extraction remains; a more mobile river corridor is a reflection of recovering bed levels but the past bed degradation associated with the over extraction of gravel means existing edge protection works are undermined.
- 9.7. The technical work undertaken by Horizons and Massey University Staff suggests the need to establish a mobility corridor to give the river more room and to transition the management interventions away from hard edge protection to one focussed more on contiguous planted riparian margins.
- 9.8. While such a management approach is ultimately a more sustainable one it also creates a range of short to medium term challenges; the investment already made in hard edge protection at key points and how much, if any, further investment should be made if the river attacks or outflanks those structures.
- 9.9. Aligned to that is the need to establish vegetated margins set further back from the river; a significant part of the mobility corridor not currently river bed is privately owned land, requiring landowners to progressively allow in many cases pastoral farmland to be planted in trees.

10. COMMENT

10.1. As noted at the landowner meetings, staff have recently visited Environment Canterbury to look at the management approaches employed with both the Waimakariri and Ashley River systems. While the Rangitikei is a river unique to Aotearoa (personal view) many of the management techniques applied in north Canterbury (such as deep pole planting) are applicable.

11. CONSULTATION

11.1. The development of a management strategy for the Rangitikei is something of an organic process – the river will continue to evolve and change requiring the same level of adaptation on the part of Council. Consultation and in particular dialogue with iwi and those landowners in the 'firing line', as it were, will be ongoing.

12. TIMELINE / NEXT STEPS

12.1. Staff are continuing to work on developing the strategy, with the next key milestone the scheme meeting scheduled for March next year. That's intended to include an information kiosk at the new Bulls Community Centre mainly focussed on the detail / vision associated with the shovel ready project.

13. SIGNIFICANCE

13.1. This is not a significant decision according to the Council's Policy on Significance and Engagement.







Ramon Strong GROUP MANAGER RIVER MANAGEMENT

ANNEXES

There are no attachments for this report.

Report No.	20-181		
Information Only - No Decision Required			

BALLANCE FARM ENVIRONMENTAL AWARDS

1. PRESENTATION

1.1 James Ryan and Terry Olsen will make a presentation to the Catchment Operations Committee on the Ballance Farm Environmental Awards.

2. RECOMMENDATION

That the Committee recommends that Council:

a. receives the presentation from James Ryan and Terry Olsen.

3. SIGNIFICANCE

3.1. This is not a significant decision according to the Council's Policy on Significance and Engagement.

Grant Cooper

ENVIRONMENTAL MANAGER LAND

ANNEXES

There are no attachments for this report.

Report No.	20-182						
Information Only - No Decision Required							

LAND MANAGEMENT PROGRESS REPORT

1. PURPOSE

1.1. This report covers work carried out by the Natural Resources and Partnership – Land Management team during the period 15 August to 31 October 2020. It includes the activity areas of Sustainable Land Management Initiative (SLUI), Regional Land and Coast, and Nursery.

2. EXECUTIVE SUMMARY

- 2.1. This report focusses on the operational targets of the Annual Plan 2020-21 Land Management Activity for SLUI, Regional and Coast, and Nursery budget activity areas. It also provides updates on the contract targets with Te Uru Rakau (TUR), formerly Forestry NZ, regarding delivery of the SLUI programme. The annex provides a more detailed update on progress.
- 2.2. This activity report relates to the period 15 August 31 October 2020. Spring conditions have generally been average (rainfall and temperatures), but have followed a generally dry 2020 calendar year. Most areas have been reporting good pasture growth, with patchy dry areas in Taihape and the lower Turakina, Whangaehu and Whanganui catchments. In Taumarunui, two September frosts held growth back. At the time of writing this report November was tending mild and wet.
- 2.3. While conditions so far would point to good tree establishment, only a small number of tree claims have been completed. Pine seedlings are reportedly establishing well while many poles are only just leafing up. Drying winds are the main concern as we go through October and November.

SLUI

- 2.4. The SLUI programme has entered into a new four-year funding contract with TUR. The Hill Country Erosion Fund (HCEF) contract provides for more than \$6.4 million in funding over four years. This year is year two with the TUR contribution being \$1.388 million, the Horizons' contribution \$3.677 million, and an estimated landowner contribution of \$4.3 million in cash, and \$0.5 million in-kind providing a total estimated budget of \$9.855 million.
- 2.5. The Whole Farm Plan (WFP) programme is contracted to complete 22,500 ha of new plans plus 1,000 ha of one-off paddock maps. At present 35 plans covering 16,922 ha are allocated for the year. We are awaiting information from a further 55 farms (more than 35,000 ha) which have progressed in the process of obtaining a farm plan. The interest in farm plans has increased following Central Government's release of consultation documents about freshwater management. In their current form, SLUI plans will not meet the requirements of the farms plans required by Government.
- 2.6. The environmental works programme is contracted to complete 3,440 ha of "on the ground" works. The programme has 4,625 ha of works allocated for the year and experience shows not all of this will be delivered within the year. The expanded budget for grants this year is \$2.337 million with allocation levels indicating up to \$3.701 million of Ministry of Primary Industry and Horizons' funding grants. That should mean Horizons SLUI reserves will be used during the year.



Regional and Coast

- 2.7. The Regional and Coast programme is funded via general rate targeting advice and grants for erosion control works on a one-off basis within the Whanganui River Catchment. These works will be largely outside of the SLUI contracted area and in funding partnership with the Whanganui River Enhancement Trust (WRET). In total 175 ha of land is targeted for erosion control works. At this point in the year 202 ha of works have been allocated between the combined programmes, with 41 ha of work completed within the Whanganui Catchment Strategy programme and 90 ha in the wider environmental grant programme.
- 2.8. The Industry Partnership programme proposes supporting five initiatives promoting sustainable land use and good management practice on farms within the region. Funding partnerships exist with the New Zealand Farm Environmental Trust and the Poplar and Willow Research Trust. Other programmes are supported as funding and opportunities allow.
- 2.9. The Soil Health programme maintains the Regional State of the Environment soil quality monitoring programme through a regional network of soil health assessments, and a general advice programme around soils and soil health.
- 2.10. This Soil Health programme is well underway with the major partnership programme involving funding for the regional Ballance Farm Environment Awards. The 2019-20 awards were streamed online video after the awards dinner, set for 19 March, was cancelled due to Covid-19. Woodhaven Gardens, a leading vegetable grower near Levin in Horowhenua District, was named 2020 Regional Supreme Winner. The judges commended the owners for changing their growing practices to reduce nitrogen loss and minimise the impact on water quality. A field day is planned on 3rd December at Woodhaven Gardens.

Nurseries

- 2.11. Council operates a number of poplar and willow pole nurseries to produce planting material for erosion control programmes. The aim is to produce and source a total of 30,000 poles per season.
- 2.12. The 2020 winter pole season was completed with provisional numbers showing 31,994 poles distributed to landowners.
- 2.13. Dry conditions in the nurseries are affecting pole growth and this, along with an anticipated drop in pole supply, will reduce the number of poles able to be harvested in winter 2021.

3. RECOMMENDATION

That the Committee recommends that Council:

a. receives the information contained in Report No. 20-182 and Annex.

4. FINANCIAL IMPACT

4.1. There are no direct financial impacts associated with this report. However, it does update members on a number of financial matters associated with SLUI, Regional and Coast, and Nursery activities.

5. COMMUNITY ENGAGEMENT

5.1. Consultation was carried out through the 2012-22 Long-term Plan (LTP) submission process and the recent Annual Plan process. Te Uru Rakau has a key role in part-funding and overseeing the SLUI section of this activity. The year-end level of delivery for this



programme and budget projection remain difficult to project due to changing situational conditions including contractor availability, lack of autumn pasture growth, delays due to Covid-19 restrictions, and potential new government legislation.

6. CLIMATE IMPACT STATEMENT

6.1. This item reports on Horizons' activity in relation to our Annual Plan targets and is not considered to have a climate change impact. The land management activity includes a range of planting programmes, the benefits of which have been reported to council in various items.

7. SIGNIFICANT BUSINESS RISK IMPACT

7.1. There are no significant risks inherent in the adoption of the recommendations contained in this report.

8. SIGNIFICANCE

8.1. This is not a significant decision according to the Council's Policy on Significance and Engagement.

Grant Cooper ENVIRONMENTAL MANAGER LAND

Jon Roygard

GROUP MANAGER NATURAL RESOURCES & PARTNERSHIPS

ANNEXES

A Land Management progress report







LAND MANAGEMENT ACTIVITY – 15 AUGUST 2020 TO 31 OCTOBER 2020

1. OVERVIEW

- 1.1.1 The purpose of this report is to update Council on the Land Management activity within the Sustainable Land Use Initiative (SLUI), Regional and Coast, and Nursery activities carried out under the Annual Plan, and the Te Uru Rakau (TUR) contract. The report is presented in five sections:
 - 1. Activity during the last reporting period and upcoming activity;
 - 2. Report on progress against the Annual Plan, and contract outputs;
 - 3. SLUI activity by Whole Farm Plan production, work completed life-to-date and year-to-date, and against targets;
 - 4. Regional and Coast work completed against year-to-date targets; and
 - 5. Nursery activity.
- 1.1.2 The Land Management programme's primary activity is to reduce hill country erosion in order to increase the resilience of the region to storm events and improve water quality. The Sustainable Land Use Initiative (SLUI) is the main component of the programme. It has more than 575,000 ha of farm plans across 800 farms and aims to complete approximately 3,100 ha of erosion control works and 22,500 ha of new farm plans in the 2020-21 year.
- 1.1.3 Beyond hill country erosion control, the Land programme also supports industry partnerships including the Ballance Farm Environment Awards and events that enable discussion among industry professionals and farmers about land management activity. The Land Management team also provides support to Horizons' regulatory teams about the implementation of the National Environmental Standard for Plantation Forestry (NES-PF) and the implementation of One Plan policies and rules about land disturbance and vegetation clearance. More recently we have been working on implementation of the NES-FW for freshwater.
- 1.1.4 Management of poplar and willow nurseries in order to provide the necessary materials for the hill country erosion work is the final component of the Land activity. Upgrades to Horizons' Woodville nursery will continue this year. The programme aims to produce more than 30,000 poplar poles to be planted annually for erosion control within our region.
- 1.1.5 The Annual Plan and contract targets are agreed, with the latest Ministry of Primary Industries (MPI) contract signed in August 2019. This commits MPI funding of more than \$6.4 million over



- four years until 30 June 2023. The overall budget for this programme exceeds \$30 million, consisting of funding from Horizons, MPI and landowners.
- 1.1.6 The MPI funding is not evenly spread over each of the four contract years and this is the lowest year for funding with MPI contributing \$1.388 million.
- 1.1.7 The Land Management activities of this year's work programme link to the Council's Long-term Plan 2018-28 and to the non-regulatory methods of the One Plan (Chapter 5, Policies 5-1 & 5-5).

2 ACTIVITY

2.1 ACTIVITY DURING LAST REPORTING PERIOD

- 2.1.1 This activity report relates to the period 15 August 31 October 2020. Spring conditions have generally been average (rainfall and temperatures), but have followed a generally dry 2020 calendar year. Most areas have been reporting good pasture growth, with patchy dry areas in Taihape and the lower Turakina, Whangaehu and Whanganui catchments. In Taumarunui, two September frosts held growth back. At the time of writing this report November was tending mild and wet.
- 2.1.2 While conditions so far would point to good tree establishment, only a small number of tree claims have been completed. Pine seedlings are reportedly establishing well while many poles are only just leafing up. Drying winds are the main concern as we go through October and November.
- 2.1.3 Staff visits to landowners tend to be lower at this time of year as lambing limits access; however many farmers have continued their fencing programmes and these claims are ahead of budget this year.

2.2 ACTIVITY OVER THE NEXT THREE MONTHS

- 2.2.1 During November to January staff will:
 - Continue to keep in touch with landowners regarding grant work. All programmes are overallocated but historically they come in closer to budget. Staff maintain funding spreadsheets with various levels of certainty of works being completed (proposed, confirmed, rolled over, cancelled);
 - Work through claim processing, visiting farms and inspecting works;
 - Complete Milestone reporting to TUR for the SLUI programme (November);
 - Hold the SLUI Advisory Group meeting at the Woodville pole nursery (4 November);
 - Deliver completed farm plans and discuss work programmes for winter 2021, including onfarm inspections;
 - Support the local Ballance Farm Environment Awards winner's fieldday on 2 December 2020 at Woodhaven (Clark property in Levin);
 - Attend the Poplar and Willow Research Trust (PWRT) AGM on 26 November where a new Trust chair was to be elected:



- Liaise with PWRT to update pole trial sites in our region;
- Continue to liaise with Ministry for the Environment (MfE) over Central Government's Freshwater proposals, specifically on the development of a Freshwater Farm Plan;
- Continue monitoring/audit programme for SLUI plans, with the aim of having a report available to TUR;
- Restart the silviculture programme in joint venture forests. Contractors will continue with programmes that were disrupted during Covid-19 lockdowns and then postponed over the planting season.

3 REPORT ON PROGRESS

3.1 ANNUAL PLAN AND CONTRACT TARGETS (2019-20)

3.1.1 The Annual Plan and Hill Country Erosion Fund (HCEF) contract targets for 2019-20 are shown in the table below.

Table 1: Annual Plan and HCEF contract targets 2020-21

MEASURE	ANNUAL HCEF PLAN CONTRACT		TARGET	YTD	PREDICTED RESULT					
Sustainable Land Use Initiative										
Erosion reduction works programmes in targeted SLUI catchments (ha)	3,100	3,065	3,100	379	4,568 ha work allocated.					
Whole Farm Plan properties mapped per year (ha)	20,000	22,500	22,500	0	16,992 ha allocated					
Farm or paddock assessments mapped per year (ha)		1,000	1,000	39	Mapped					
Case study completed (number)		1	1	0	One proposed					
Feasibility reports (number)		6	6	0	On track					
Regional and Coast										
Manage grant programmes to deliver erosion reduction works (ha)	175		175	45	247 ha work proposed					
Support industry initiatives that promote sustainable land use (number)	5		5	started	5					
Operate council nurseries and source additional commercial pole material to deliver poplar and willow poles to control erosion (number of poles)	30,000		30,000	31,994	Preliminary figure includes 24,464 from Horizons' nurseries.					



4 SLUI ACTIVITY

4.1 WHOLE FARM PLAN (WFP) PRODUCTION

4.1.1 WFPs are a tool for bringing new land into the programme and for allocating grants to farms on various land types (priority land). An important part of maintaining the momentum of SLUI is the ability to bring new farms, new land and new work into the programme. This table shows the plans completed in SLUI's life-to-date (LTD) and progress with bringing new plans into the programme.

Table 2: WFP production (life-to-date)

No. of Plans	Hectares	Comments
800	575,000	WFPs completed in SLUI to 30 June 2020 - 51 plans
0	0	Plans/ha mapped in SLUI in 2020-21
35	16,992	Plus plans/ha on list to be mapped in 2020-21
35	16,992	Equals (0 \pm 35) plans on list to be mapped in 2020-21 financial year
57	38,930	Information with landowners who are still to finally commit to a plan

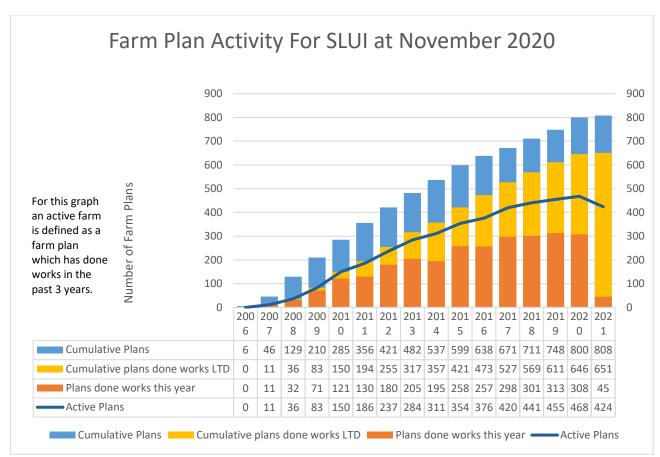
- 4.1.2 Of the 51 plans mapped last year, 31 have been delivered to farmers and 17 of these have agreed to start a works programme.
- 4.1.3 There are 35 (16,995 ha) of plans allocated to the contractor in 2020-21. This is less than the target so more plans are being sought from the "information out with landowner" list of 10 farms expected to return the information by the end of December.
- 4.1.4 There has been an increase in interest in WFPs but much of this is centered around the new Freshwater plan as proposed in the government regulations. SLUI WFPs will not meet the requirements of a Freshwater plan.
- 4.1.5 We are awaiting the return of information/documents from a further 57 farms, accounting for 38,930 ha. Those with paperwork outstanding have been prioritised by:
 - 1. Having existing plans;
 - 2. Being on top priority and high priority land;
 - 3. Being in the Oroua Catchment; and
 - 4. The likelihood of doing works.

Some of those on the list who have had the information from Horizons for some time will be followed up with a reminder to provide the information, and if this is not provided by a certain date they will be removed from the list.

4.2 WHOLE FARM PLAN ACTIVITY

4.2.1 The contract targets focus on the number of plans completed; the activity of individual plans over the life of the programme and on an annual basis is another measure of SLUI activity. The number of plans active in any one year can and does change.





Graph 1: Farm Plan Activity at November 2020. Note the results for 2021 (2020-21) reflect the timing of this report at an early point in the year.

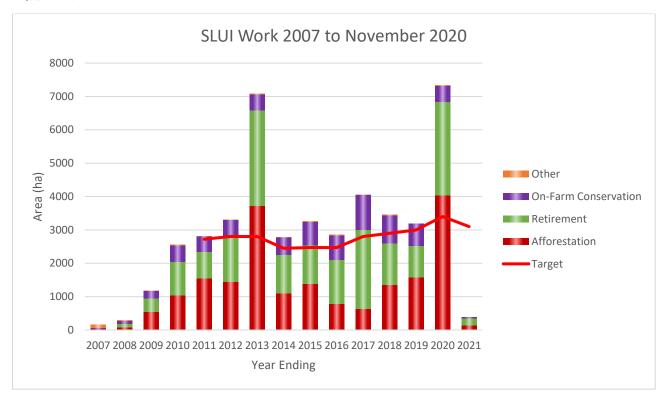
- 4.2.2 Graph 1 looks at the farm plan activity as a whole and in any particular year. It is a "stacked column graph" where the orange, yellow and blue components of the column add up to the total number of plans in SLUI at the end of any given year. For example, in 2019-20 there were 800 plans completed over the life of SLUI, 646 plans had completed some works (81% active), and 308 plans had completed some work in that year (i.e. 39% of plans active in 2019-20).
- 4.2.3 The solid blue line tracks "currently active" farm plans where active is taken to be "has completed works in the last three years". In this instance the number of plans at the end of 2019-20, with some works completed in the last three years, was 468 (59%).
- 4.2.4 The data in Graph 1 shows a trend of more active plans (yellow stacked column) and also shows that the number of plans active in any given three-year period (blue line) had grown to 468 by the end of 2019-20 but subsequently reduced to 424 in the 2020-21 year. There are a number of reasons for this including older plans will have completed priority works and may be less motivated, landowners with more than one plan may be concentrating on one farm at a time, and if ownership changes or circumstances change plan works may be a lower priority. The blue line also shows a decrease for 2021. This is expected at the start of the year and recently completed plans will not be active yet.



- 4.2.5 We have undertaken further analysis of the "inactive" plans with the aim of introducing a "maintenance" category. These are plans where they:
 - Haven't been active over the last three or more years, and
 - Have completed works on at least 70% of their Top and High priority pasture land.
- 4.2.6 These plans are considered to have done the bulk of their work programme but we are hesitant to label them completed. There are currently 11 plans assessed as being in this "maintenance" category.

4.3 SLUI LIFE TO DATE AND OUTCOMES

4.3.1 SLUI Life-to-date



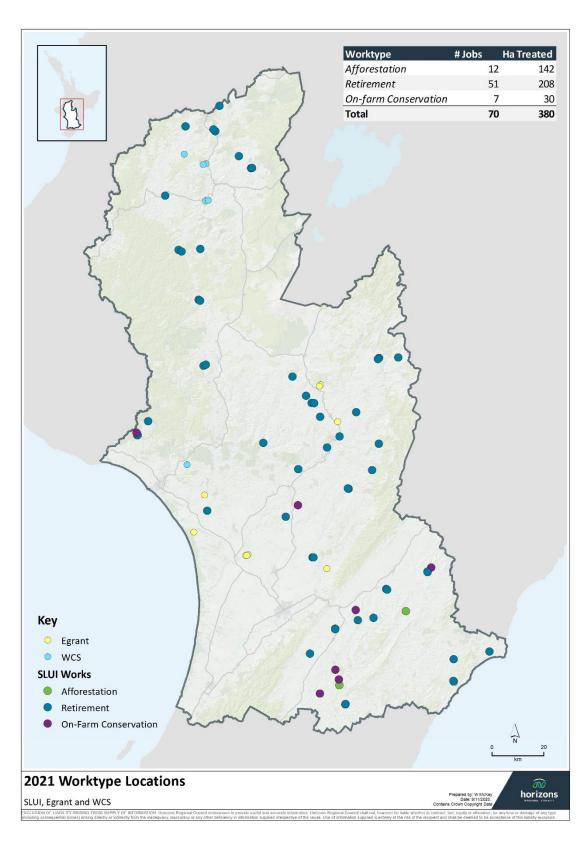
Graph2: SLUI works completed by work type during the life of the programme against annual contract targets (red line). Note 2020 is a partial year at this stage. See Graph 3 for the change in job status through the year.

- 4.3.2 Each year since 2010 the contract target for hectares of works completed has been exceeded.
- 4.3.3 Last year had the most work completed with just over 7,000 ha of work. Afforestation and retirement made up the bulk of the work.
- 4.3.4 The notable years for afforestation were 2013, when there was a high level of uptake for the Afforestation Grant Scheme, and 2020 where there was a large amount of carbon and carbon/timber forestry established.
- 4.3.5 Retirement programmes also peaked in 2013 and 2020. In 2013 this was due to a large amount of jointly funded Nga Whenua Rahui work completed in the Whanganui and Whangaehu



- catchments. In 2020 a large contribution was due to one major retirement project in the upper Rangitikei catchment.
- 4.3.6 On-farm conservation (purple) is predominantly space planting and gully planting with poplar and willow poles but which also includes structures and earthworks. It is consistently about 500-1,000 ha per year and the limitation is largely pole supply.
- 4.3.7 At the current rate of progress analysis suggests it will take 112 years to carry out works on all the top priority land that is currently in pasture. This calculation is based on completing approximately 3,000 ha of work per year with 1,000 ha on top priority land with about 500 ha of that in pasture. The other 500 ha is retirement of existing tree-covered land. All the high priority land that is currently in pasture is estimated to take 252 years of works.
- 4.3.8 Outcomes for SLUI have been modelled by Manaaki Whenua Landcare Research (MWLCR) and this work was reported in the 2019 State of Environment Report (SOE) at page 19. https://www.horizons.govt.nz/CMSPages/GetFile.aspx?guid=a77bc2a4-381f-4660-8ef9-4e2486ac7165
- 4.3.9 The MWLCR modelling reports:
 - That SLUI works to June 2018 are estimated to have reduced sediment load in rivers by 835,000 tonnes (6%) with the greatest reductions (up to 19%) in the Kai Iwi, East Coast and Lower Rangitīkei areas.
 - With ongoing implementation of SLUI works at approximately the current pace, the average annual sediment load could be decreased by 27 percent and water clarity improved by 29 percent by 2043.
 - However, climate change is likely to alter annual rainfall patterns and increase hill slope erosion and river sedimentation, particularly in the northern and western areas of the region. Modelling suggests that this could result in a potential change to the predicted reduction in sediment load from 27 percent by 2043 to just 19, 12 or 5 percent under minor, moderate and major climate change scenarios, with the amounts varying across the region.
 - Modelling also shows that SLUI, New Zealand's largest hill country erosion programme, may not offset the increases in sediment load from climate change in the longer term, as sediment loads in rivers could increase by between 40 and 180 percent by 2090. This suggest the long-term effectiveness of work already undertaken through SLUI is expected to reduce under climate change, as heavier rainfall events increase sediment loading in the region's rivers.





Map 1: Location of all grant works completed this financial year (SLUI and Regional and Coast).



YEAR-TO-DATE ACHIEVEMENTS 4.4

4.4 YEAR-TO-DATE ACHIEVEMENTS									7
4.4.1 The table below shows the types of works completed and claimed this financial year.									E
Table 3: Works year-to-date (completed and claimed, by grant amount and land priority)									
Hectares By Land Type									
Worktype	Claims	Farms	(Grant \$	Not Erodible	Erodible	High Priority	Top Priority	Total Ha
Afforestation	12	10	\$	124,377	17.5	39.2	65.6	19.7	142
Retirement	20	19	\$	96,069	2.4	50.5	15.4	23	91.3
Riparian Retirement	23	18	\$	140,777	14.8	46.6	12.1	27.1	100.6
Wetland Retirement	7	7	\$	41,675	5	9.6	-	0.8	15.3
Managed Retirement	1	1	\$	3,168	-	0.4	-	-	0.4
Pole Planting	7	7	\$	12,311	0.1	14.6	4.8	10.5	30
Total	70	47	\$	418,378	39.8	161	97.8	81	379.6

- 4.4.2 The 379.6 ha of works completed and claimed is 12% of the Annual Plan full-year target of 3,100 ha.
- 4.4.3 Hectares completed by land type shows 178.8 ha (47%) of work claimed to date this financial year is on high priority and top priority land. The bulk of this work has been completed on afforestation projects.
- 4.4.4 There have been 70 claims completed to date on 47 farms.

FORECAST VS ACTUAL (TARGETS VS ACTUAL BY WORK 4.5 TYPE)

4.5.1 Table 4 shows the forecast figures against target for 2020-21. The work programme is fluid and changes throughout the year. Some of the changes are due to postponements or cancellations and some are due to new plans coming on stream and bringing in new work programmes. The dollars shown in the table are the grant cost. It is unclear yet how Central Government's Freshwater rules governing river fencing will affect the work programme. There will be more riparian fencing completed and more requests for funding, although this is already overallocated. Further ahead, farmers may choose to redirect funding from afforestation or other works to riparian protection, and as a result the programme may struggle to meet some targets.



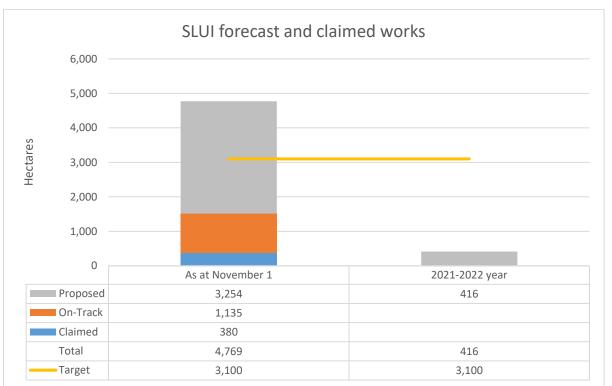
Table 4: Work this financial year (contract vs forecast vs actual by hectares and dollars). Note that the negative values in the actual minus contract column reflect the early stage in the year of this report.

Work Type		Hecta	ires		Dollars \$ x 1000			
	Contract Target	Forecast	Actual	Actual vs Contract	Contract Target	Forecast	Actual	Actual vs Contract
Afforestation	1,250	2,381	142	-1,108	939	1,168	124	-815
Retirement	600	758	91	-509	261	865	96	-165
Riparian Retirement *A	220	493	116	-104	357	1,552	182	-175
Managed Retirement	85	17	0.4	-84	25	27	3	-22
Space Planting & Gully Planting	900	880	30	-870	398	314	12	-386
Structures/Earthworks	10	-	0	-10	60	0	0	-60
Other (inc. blank)	-	36	0	-	63	28	0	-63
Total *B	3,065	4,567	379.4	-2,686	2,102	3,969	418	-1,684

^{*}A – includes wetland retirement

^{*}B – Annual Plan Target is 3,100 ha, SLUI Contract Target is 3,065 ha.





Graph 3: Changes to SLUI job status through the year and the works allocated for the next financial year. "On-track" means the Land Management Advisor has re-confirmed the work with the landowner or is confident the work will proceed. Graph 3 updates Table 4 with more recent forecasts.

- 4.5.2 Table 4 compares contract target (ha and \$) to forecast and actual. There can be wide variations in individual work targets, i.e. in reality the contract is to deliver 3,065 ha and the mix of work type will change from year to year. Graph 3 tracks the changes in amount of work and the certainty of that work being completed over the course of the year and into next financial year, as understood through conversations with landowners.
- 4.5.3 Graph 3 shows that the jobs allocated at this stage of the year include a high proportion of "proposed" works. These are often fencing projects planned for summer and autumn. The "Ontrack" jobs are primarily associated with winter afforestation or space planting. As the year progresses the ratio of proposed, on-track and claimed works changes.
- 4.5.4 Graph 3 doesn't record that there have been 12 jobs cancelled, saving \$180,000 of grant expenditure. These jobs are split between afforestation and fencing projects.
- 4.5.5 Current allocation includes jobs recorded as claimed, on-track and proposed. Based on past experience, approximately 70% of that proposed work will be completed by 30 June (2,278 ha). Graph 3 will is updated regularly as staff make contact with landowners to confirm work programmes.
- 4.5.6 Note Table 4 and Graph 3 are already showing a different year-end outcome as the works programmes are constantly changing. Staff are still getting requests for work to be approved in this financial year. At this stage we will accept small jobs such as pole programmes or fencing



works from new plans, but larger jobs are now being allocated to 2021-22 and there is already 416 ha (approximately \$150,000 grant works) allocated to next financial year.

4.6 JOINT VENTURE FORESTRY OPERATIONS

- 4.6.1 Horizons has interests in 10 joint venture (JV) forests (under a registered Forestry Right) with a net stocked area of 1,387 hectares. A report on these forests was provided to Council in April 2017 and another report is planned for early next financial year. Work and expenditure in the forests includes rates and insurance payments, maintenance of tracks and fences, pest control, audits and inspections, monitoring and measurements, arranging silviculture, valuations for external audit, maintaining Emission Trading Scheme registration and reporting, and liaising with landowners.
- 4.6.2 Work has started on this year's silviculture programme. It will be a busy year with work to catch up following the Covid-19 lockdown. At this stage thinning has been completed on Wickham (Roswicks) and quality control plots have been completed.
- 4.6.3 A project is also underway concerning the value of the forestry and carbon, and forecasts for these will be made to inform the Long-term Plan process.



5 REGIONAL AND COAST ACTIVITY

5.1 PROGRESS ON ENVIRONMENTAL GRANT AND ADVICE

5.1.1 Environmental Grant funding is in place to support landowners to undertake works that will reduce erosion and protect the environment. This funding is targeted slightly differently between the Regional Land and Coast (RL&C) environment grant and the Whanganui Catchment Strategy (WCS) grant. Under the WCS, support from Whanganui River Environmental Trust (WRET) enables a greater variety of work to be funded and at higher grant rates in some areas.

Table 5: Work area and budget expenditure for the year to date

WORK AREA (ha)				BUDGET (\$)				
Grant Type	AP Target	Allocated	Complete	AP % Complete	AP Budget	Allocated	Complete	AP % Complete
wcs	75	110	36	48	113,000*1	133,502	30,113	27
RL&C	100	137	9	9	80,000	129,949	42,018	53
Total	175	247	45	26	193,000	263,451	72,131	37

- Note *1 this is \$50,000 Horizons and \$63,000 WRET
- 5.1.2 A total of 146 projects have been allocated to date with an estimated work area of 247 ha.
- 5.1.3 Space planting accounts for 63 of the 146 projects and riparian retirement 39.
- 5.1.4 WRET allocation of \$63.000 could not be confirmed until its AGM in November.
- 5.1.5 Both areas are over-allocated and some jobs may have to be transferred to the 2021-22 year; however 15 jobs are already approved for 2021-22.

5.2 INDUSTRY PARTNERSHIPS

BALLANCE FARM ENVIRONMENT AWARDS (BFEA)

- 5.2.1 The Ballance Farm Environment Awards Regional Supreme Winner evening was cancelled and the winner's field day postponed. The field day was to be held at Woodhaven, Levin, on 2 December 2020.
- 5.2.2 This year's programme has been revised, with no awards being run. The New Zealand Farm Environment Awards Trust (NZFEAT), which runs the awards programme, is considering revamping the awards for the 2020-21 year. The sponsorship agreement has been re-negotiated and fewer events will be run this year.
- 5.2.3 The NZFEAT Trust has recently held its elections and Terry Olsen (Chair of the Horizons BFEA committee), has been elected to the Trust.

POPLAR AND WILLOW RESEARCH TRUST (PWRT)

5.2.4 The PWRT held its AGM on 26 November. Bruce Wills stepped down as Chair of the Trust. The Trust is scheduled to meet in the next reporting period and an update will be able to be provided to the Catchment Operations Committee when this item is presented.



- 5.2.5 PWRT held a Technical Advisory group meeting in September where Regional Councils gave input into the research and work programme to feed into the AGM, however Post-Covid-19 budget travel restrictions limited attendance to representatives from only four councils.
- 5.2.6 Regional councils and the PWRT have continued to fund a project investigating the establishment of poplar sawfly near Dunedin. This project was cut short due to Covid-19 last autumn and an extension of funding has been approved from the Sustainable Food and Fibre Fund.

BEEF AND LAMB NEW ZEALAND (BLNZ)

5.2.7 Staff have attended a number of BLNZ workshops over the past few months with two workshops covering farming and the Emissions Trading Scheme (ETS). BLNZ has engaged Forest 360 to present to farmers about how the ETS may affect them. Staff have been present to clarify funding available through our grant programmes. The other priority for BLNZ has been to run workshops outlining Central Government's Freshwater rules. Staff have been present and answered questions.

OTHER

- 5.2.8 Staff have attended and presented at a number of events including:
 - Various catchment group meetings including Porewa, Kawhatau, Northern Manawatu, Moawhango, Waitahora, Te Maire, and the combined Rangitikei group AGM. The support requested and given varies with the individual groups but this is a growing area with implications for staff time on the Land, Freshwater and Science teams in particular;
 - Various farm discussion groups and farmer visits. Central Governmentss Freshwater rules
 have dominated the discussion, especially Intensive Winter Grazing and the low slope map
 for river fencing. Staff have encouraged farmers to submit questions to the Ministry for the
 Environment website about the low slope areas;
 - Staff are involved in Horizons' response to the Freshwater rules, helping a proposed consenting process for Intensive Winter Grazing and with a cross-council input into the Freshwater Farm Plan;
 - Staff attended and spoke at a carbon forestry workshop in Dannevirke;
 - Staff continue to liaise with Tararua District Council on its Right Tree Right Place work programme, funded through the One Billion Trees Programme. Up to three case studies, looking at the options of timber and carbon within the farming system, will be completed.
 - Liaison with SCION (forestry research) regarding setting up a catchment trial of water quality and quantity within a mature forested catchment. The proposed site is within the Akitio catchment.

5.3 SOIL HEALTH

5.3.1 Planning is underway for the summer soil health programme.



5.4 WHANGANUI CATCHMENT STRATEGY (WCS) AND WHANGANUI RIVER ENVIRONMENTAL TRUST (WRET)

- 5.4.1 Work programmes in the upper Whanganui-Ruapehu area are ahead of target as grant works were completed earlier this year. Grant claims traditionally slow up during the lambing season and into Christmas as farmers are busy with stock work.
- 5.4.2 Staff have continued to liaise with WRET regarding funding of the works programme. An Annual Report is being prepared but at this stage WRET have still to confirm the date of its AGM. We are proceeding along the lines of funding for a normal year's work programme, but we would be able to complete more grant work if WRET is willing to approve it.



Photo 1 SLUI riparian retirement in Ruapehu area – Taringamotu Stream uses a 2-wire cattle exclusion allowing for possible flooding. Photo Weston Brown.

5.5 SUPPORT FOR CONSENTS AND COMPLIANCE

- Advice to landowners regarding the need for consents or compliance for a number of activities which may be permitted or require consent, including:
 - Four on vegetation clearance including one where no consent was required;
 - Four providing advice about vegetation disturbance and forestry in red zone areas;
 - Two earth disturbance including one where no consent was required;
 - Two requests which were passed onto Compliance, one for forest harvesting and one culvert.



6 NURSERY

6.1 WORK PROGRAMME TO DATE

- 6.1.1 WRET-supported nurseries in the Ruapehu District:
 - 2,456 poles were cut from Horizons, WRET and landowner nurseries (estimated production was 2,200 poles);
 - Spraying has commenced;
 - Whio (blue duck) nursery has expanded with 1,300 new stakes planted;
 - 900 stakes were planted as a replant in Mangapapa nursery.

6.1.2 Woodville:

- Spring growth is underway and contractors are busy pruning poles while mowing and mulching are ongoing;
- Spray operations for rust and aphids are planned for November.

6.1.3 Bulls:

- 2,000 old kawa and veronese stools have been removed at Horizons' Bulls nursery and more than 6,000 new plantings made. This will be followed up by approximately 1.5 ha of new planting next year;
- Work planned in November includes pruning and thinning and spraying.