

RIVERCARE MEETINGS 2019 – TASMAN DISTRICT – River Control and Flood Protection

Agenda

1. **Welcome.**
2. **Apologies**
3. **The year in review**
4. **Finances**
5. **Specific Work / Issues for each catchment**
6. **Questions**

Year In Review

- If you can keep your questions until the end that would be appreciated (pens and post-it notes to note down questions as we go).
- It has been quiet flood wise since Gita, up until heavy rain in mid-July with many areas receiving 100-150mm in 24-36 hours which has triggered more flood damage, mostly in River Z areas. The last year has been mild and warm, certainly this is the warmest winter in Tasman I have experienced. We had a couple of quiet months around the time of the Wakefield fire as contractor resources were diverted for this emergency. Up until recently ground conditions remained firm and flows low with the lower than usual yearly rainfall enabling our contractor to undertake consistently high volumes of work, with the Gita flood damage now largely completed.
- Planting work. We have continued with our native planting programme concentrating on the Waimea/Wai-iti, Moutere, Lower Motueka and Sherry Rivers. We have stopped subsidising stream planting on private land under our River Z budget until we are in a better financial situation, but other Council budgets can be accessed for this.
- Willows: we are continuing to build up our stocks of tree willows in our Appleby nursery. Shrub willows in the nursery were severely affected with only one out of three varieties surviving (Musk willow, Kinuagi and viminalis(Gigantea) gone). We have built on last years increase in willow planting and are planting up to 4 thousand willows this winter, mostly around and in-between existing rock structures.
- With flood damage and rockwork tasks largely complete, we have begun catching up on willow layering in rivers such as the Upper Motueka, Motupiko and Waimea.
- Our relationship with Fish & Game is currently excellent. They have worked with us so that we can complete flood damage on trout spawning waterways during spawning season such as the Motupiko and Dove allowing us to complete this important work in a timely fashion.

- High demand for river gravel has continued with the ongoing development boom, and doesn't look like slowing. Aggregate producers are pushing to secure long term supply which amounts to more land based extraction as the rivers can only supply a small proportion of what is required. We have issued what we can on the surveyed network for most of the main rivers, but need to restrict further removal from these areas until we can re-survey in 2021.
- Riverbed Monitoring report – a report was presented to ESC earlier this year which summarised the results of the last round of bed surveys (2015-2017). You can view this on the Council website, search for Rivercare or Bed Level Monitoring.
- RPA (drone use) – these are proving a very useful tool to inspect long lengths of rivers. We then review the photos back in the office with our contractor to decide what work needs to be done. This doesn't eliminate site visits completely but is saving a lot of time, and increasing our current knowledge as to the condition of the rivers we are responsible for. The photos are saved, and can be referred back to if required. We are also going to be using this technology for surveying gravel takes, the ability to take 'to scale' aerial photos can also assist us with the design and quantity estimation for proposed works.
- GWA situation – good news, SCION the appointed Govt research agency have completed their testing and believe the imported parasitoid wasp poses very little or no risk to our native and existing aphids. They are preparing an application to the EPA and if successful hope that they will be able to be released in early 2020. Anecdotally, the aphids were not bad this summer. Theories are that the drought may have reduced numbers as many willows slowed down to stopped growing stopping the flow of sap. Another theory is that the recently established Harlequin ladybird has been eating them.

Finances

Extra \$2.2M granted by Council in December from Districtwide Disaster Fund so Gita damage could be repaired. Have spent most of this with Gita repairs completed other than a small amount of work in the Moutere. \$2.7M spent on physical work last financial year. \$1.2M spent on repairing Gita damage 18_19 year XY rivers. \$1.4M on non-Gita.

It means we have started this financial year with a zero balance, but we have no flood reserve left.

It will recharge at a faster rate (\$200K/yr from Z budget), but we are still exposed if we get another major event in the next couple of years. Back to business as usual now with \$1.8M annual budget for physical works in fully maintained rivers.

Other than hoping for the best and expecting to draw on the Districtwide fund again, options are to increase river rates and/or reduce our level of service. This could mean things like taking longer to undertake repairs, reducing our River Z subsidy level. We believe that landowners get a very good deal in Tasman, with some of the lowest river rates in the country. To my knowledge there has been no significant increase in our river rates since they were struck in 1993.

Upper Motueka

- \$1M or 38% of physical works expenditure on this catchment
- The majority of expenditure has been in the main stem of the Upper Motueka, mostly bank protection work but also willow planting in the section between Kohatu and Tapawera.
- Work has been carried out along the full length of the Y rated Motupiko reaches this autumn/winter. We undertook a visit with Fish & Game in the Motupiko to learn about trout Redds and review various jobs. Changed methodology on one job and deferred a couple of other but otherwise all work completed. Will be returning in spring to complete the last few jobs and undertake some environmental monitoring reqd by our consent.
- Tadmor has had a lot of work done, rockwork, gravel relocation and willow planting/layering.
- The Sherry has had a small amount of willow and tree removal work undertaken, plus native plant maintenance and planting.
- Willow layering in the Hinetai ford area is underway. A lot of the willows along this river are well past layering and are dead, so we will need to assess areas for replanting or further layering next year.
- Fairway spraying completed this year in the main stem only.
- Concerns about the hop garden along the Tapawera straights and its expansion up to Kohatu. Need to preserve access to maintain river, don't want stopbank or wetland area affected. We have met the owner on site to make our concerns known and will be returning to discuss their plans for the expansion. While not strictly our area of concern, we are also concerned at the amount of potential water usage this industry expansion will have.

Dove River

- \$200K or 7% of expenditure (\$300K or 11% to March 2018)
- A number of river Z jobs also completed in side tributaries or above the Y cut-off
- Hit badly for the second year in a row, April 2017 flood, Gita Feb 2018.
- All Gita flood damage work completed, other than at one landowners where the ford was not deemed safe enough for trucks to cross.
- Have inspected most of the 23 July damage so will be returning to complete this work.
- No need to fairway spray last summer, will review whether needed this year.

Waimea Catchment

- \$340K or 12% spend, mostly on Wai-iti
- Two stopbank mows, partial fairway spray
- On top of Chocolate vine infestation, lower Wai-iti.
- Continuing fly tipping removal including abandoned cars
- Gating off of LQSt to Appleby bridge working well, gate vandalism has ceased.
- FH building shared pathway along edge of river through their quarry site.
- Native planting losses from drought particularly with older trees 5 years old or so in Waimea catchment, new plantings coped very well, hoping for some rebound in spring however.

- 4WD damage to stopbank an issue again
- Hoping to construct Challies Rd extension and close River Rd access this summer, reliant on funds from next section of Challies island fish out ponds/wetland development.
- Scheduling works currently, willow removal left bank Appleby bridge, protection of track L Q St area, consideration of improving erosion protection where active area close to stopbank along track from River Road. Topping up of section along stopbank that has been graded off. River Road pines to be logged.
- Looking at collecting geotech info on banks to improve our knowledge to feed into flood protection tool. One flapgate to be replaced.

Lower Motueka

\$662K spent, 24 %, X&Y reaches. Doesn't include River Z expenditure which has been significant for this catchment due to Gita.

\$353,000 net River Z Gita spend 18_19 year.

- Very little flooding or damage to main stem and Riwaka River due to Gita, was mostly in River Z areas in the Motueka Valley, Little Sydney, Brooklyn.
- The Moutere River and ditches were badly affected by Gita so most of expenditure here and some further damage from the 19 July event.
- Did a full aerial inspection of fully maintained section from Mouth to Graham Valley
- Built groynes upstream of Peach Island by Hurleys bank.
- Hurleys bank needs to be better maintained, need access for mowing.
- A number of gravel extractions upstream at Woodstock but reaching the sustainable limit before next bed survey.
- Stopbank inspection by geotech engineer, awaiting report, part of a project the planning team in Engineering are undertaking Riwaka/Brooklyn/Lower Motueka. Information will feed into Flood Protection Asset Tool, risk based tool for identifying improvement works for flood protection schemes.
- Project to form an Emergency Response Plan for flooding of Motueka township is underway, largest river closest to major population centre.
- Are needing to sort our issues over access and control of the stopbanks. Don't want grazing of banks, locked out of various parts and too narrow to mow safely in others. Also need more control of landowners putting structures on or in the banks.
- Improvements to Little Sydney gates being planned.
- Making access to two of the flapgated outfalls safer and more secure.
- Work we are/aren't doing on the Brooklyn.
 - Part of Motueka flood protection scheme so designed to protect property from a 50yr flood in that river, not the Brooklyn.
 - Banks too narrow to mow but not grazed.
 - It gets inspected and we regularly remove wilding willows growing in the channel.

Aorere Catchment

- \$150K, 5% of total expenditure Y rated section. No work done on Kaituna.
- Carters Road bridge completely rebuilt following Gita.
- Some outstanding work to be done on Morleys Creek, several areas of erosion from over flow point to Main Road bridge.
- Several small gravel extractions from the Aorere by local landowners.
- Low flow aerial photography in March (Aorere only not Kaituna).

Takaka

Work Undertaken

- 13% of total or \$360,000 spent this catchment for the year (Y rated rivers).
- Bank protection and gravel relocation, willow layering in all three rivers. Most of the work was carried out in the Upper Takaka following Gita damage. Easy access to middle section that dries out, especially this year with the record low flows in March.
- River Z work in Upper Takaka, Waingaro and top of Anatoki following Gita.
- Cobb bridge now restored.
- A small amount of fairway spraying done in the Upper Takaka.
- Gravel was removed from Paynes ford with potential for more to be removed.
- Lower Takaka all degrading however other than a build up a Roses Beach. Has been little work undertaken in the lower Takaka. Had to bring more rock in for the Waitapu Bridge as the initial works slumped.
- Low flow aerial photography in March/April

Anatoki & Waingaro Bed Surveys

- The Anatoki River survey was completed in autumn. Flows got too high in the Waingaro so will complete this in spring/early summer.
- Have accurately surveyed old benchmarks where they still existed so will be able to display in our GIS and make it easier next time. Found old location plans from the Takaka Flood Protection Days to locate them.
- Also found data from two previous surveys for both rivers and imported into our analysis software so we have something to the current bed levels to.
- Anatoki results are....

Swimming holes

- Distribute hardcopy photos of Top Rocks and Paynes Ford (in this document, taken early March 2019 at time of extreme low flows)

Top Rocks 1



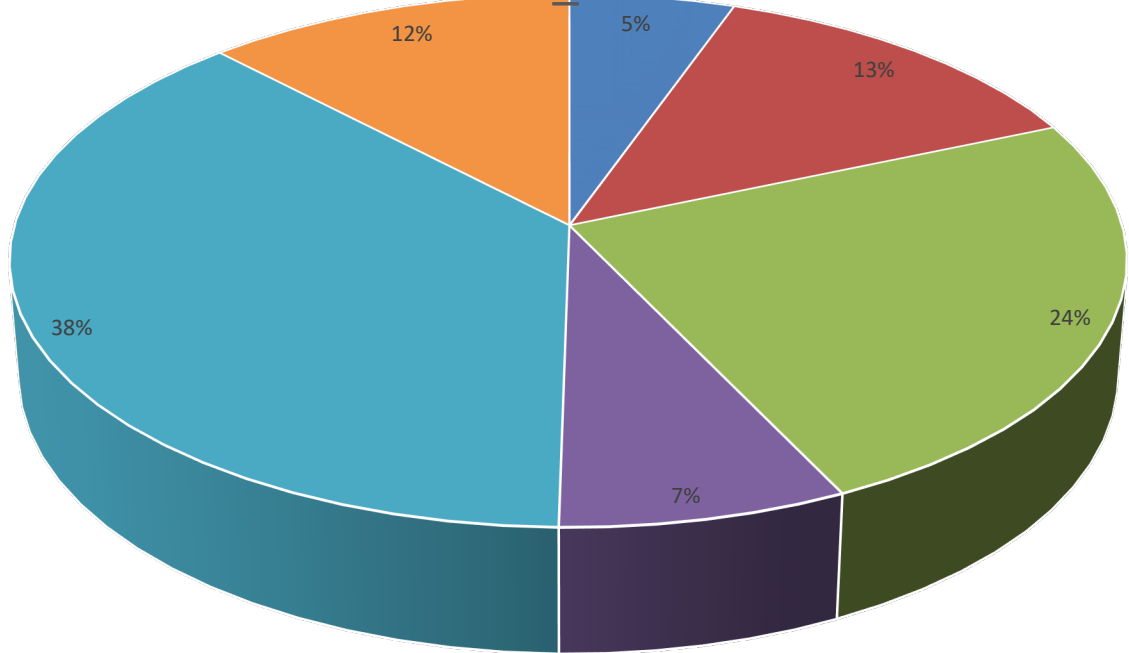
Top Rocks 2



Paynes Ford



C1064 Physical Works Expenditure 2018_19



■ AORERE

■ TAKAKA

■ LOWER MOT

■ DOVE

■ UPPER MOT

■ WAIMEA