From: Hughey, Kenneth

To: <u>Jo Macpherson; Karina Morrow</u>
Cc: <u>Michael Slater; Ken Hughey</u>

Subject:Waitaki decision document 23 June 2022.docxDate:Thursday, 23 June 2022 10:34:13 amAttachments:Waitaki decision document 23 June 2022.docx

Morena all – the attached has been put together with haste, and as we all know haste can make waste. So, I'm sending it to you all while noting Mike intends signing off today.

Mike – naturally I am happy to do more work if required. I am doing Lincoln work starting 2 minutes ago but do have time! Jo and Karina – there will be gaps but I promised Mike this would be short and to the point and I think it achieves that? But if there are significant errors or gaps please let me know

and I will change!

Cheers Ken

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23 June 2022

TO: Mike Slater, DDG Operations

FROM: Ken Hughey, Chief Science Advisor

SUBJECT: Waitaki River consent renewal negotiations recommendation

1. Context:

Both Meridian and Genesis are in the process of renewing their consents under the RMA to operate their hydro electric facilities on the Waitaki River. Together they have begun, without prejudice, to negotiate side agreements to produce better outcomes and reduce the costs associated with many aspects of the consenting process. These negotiations have been on a one to one basis between the generators and other parties. DOC is considered by the generators, along with the three associated papatipu runanga, to be a key other party.

It is important to note that these consents cover all of the water related generating activities along the length of the river and therefore include the Lower Waitaki – previously this was separate. Therefore we were dealing with a whole of catchment context.

9 (2) (g) (i)

Αt

that point the DDG Operations contacted the Chief Science Advisor (CSA) to assess his willingness to lead a reinvigorated approach with the generators. This was agreed to and a governance group of the DDG Operations, the Chief Science Advisor and the Director Eastern SI¹ was established and met when needed to be appraised of progress and issues. When necessary the DDG Operations and the CSA updated the Director-General. This brief memo updates you on the outcomes of those negotiations and recommends a way forward.

By way of reminder – DOC and the generators agreed that the negotiated package should exceed, from a biodiversity conservation perspective, anything likely to be achieved through continuing down the consent process line 9 (2) (h)

2. The negotiation process in brief:

We essent ally led the negotiations and used a 'getting to yes' approach based on defining and seeking agreement about the desired biodiversity outcomes to be sought via mitigation – to help achieve this we built a set of agreed negotiating principles that were supported also by Governance.

In summary the process involved:

• the CSA working with a 'technical advisory group' which provided essential building block material based on the best available information – this enabled us to build and paint three initial scenarios across four defined river zones, and

¹ When Jo Macpherson was appointed Director ESI she essentially withdrew from ongoing active involvement in some negotiation meetings and with agreement was replaced by Karina Morrow.

² Richard Maloney, Colin O'Donnell, Dean Nelson, Nicki Atkinson

- a broader internal reference group that included the aforementioned, Susan Newell (legal),
 Herb Familton (planning) and Michael Hayward (communications). Weekly update meetings
 of the latter were held from mid-February, and as-need-be meetings were held with the
 TAG or individual members thereof. This was a fully transparent process. The only
 information that has been confidential is the proposed financial agreement emerging from
 our most recent meeting with the generators on 22 June 2022.
- regular scheduled negotiation meetings with the generators, typically weekly these were
 mostly held over Teams but two very important meetings were face-to-face at the DOC
 office in Christchurch. The CSA attended all of these meetings and facilitated them,
 supported as noted by Jo Macpherson and Karina Morrow.
- Two hui with the three papatipu runanga' Waitaki Working Group it is important to note that more dialogue is essential and that is understand by us and the Waitaki Working Group.

It is extremely pleasing to report that the internal support I have received from the TAG has been exceptional in all regards, notably in terms of quality and timing. We have worked really hard to be proactive with the generators and this has been noted by them – This could not have done without Richard and Dean on the technical side, and Susan and Herb on the legal and planning side. Others were also very supportive.

In terms of the actual negotiation process, and as noted above, we developed and presented three scenarios across four zones (We described this using an initial metaphor of a house and rooms, and options within). This approach resonated and enabled our TAG to present their 'ideal' (scenario 1) and lesser regarded scenarios. Perhaps not surprisingly, the generators, while accepting the approach, and understanding and supporting the ideal faced a number of reality tests, including resourcing. They thus counter offered, agains this context, but at a level no one in our teams supported. This situation created some healthy tension which we responded to by building two 'lesser' packages (within the context of our scenario 3).

3. The final packages and what has emerged:

We developed two final packages for negotiation with the generators. It is important to understand them, so in brief:

- Package 1 concentrated mitigation on affected rivers, i.e., the Lower Waitaki, the Upper and Lower Ōhau, Pūkaki, and Tekapō catchment. Its cost to implement on an annual basis was estimated to be \$2.7m (+GST) and including Overheads and Research and Development this package will deliver benefits to many at risk native bird species and terrestrial invertebrates.
- Package 2 was the above plus targeted work on the Lower Ahuriri and Tasman rivers and was in the order of \$3.5m annually.

These packages were shared with the generators on 16 June and were the subject of a negotiation meeting on 17^{th} June. We agreed to do some more work to firm up the OH and R&D components and met again on 22 June (noting also that before several of these meetings, including this one, the CSA had one on one phone discussions with their lead negotiator 9(2) (a) from Meridian).

The result of the meeting on 22 June was that the generators presented what they described as their 'final' offer (Appendix 1). It was largely package 1 but at a reduced cost (\$2.3m +GST) pa (and a number of other helpful aspects, e.g., annual 2% CPI adjustment, 10 year review), from 1 July 2025 (when the new consents will apply). The CSA and Jo Macpherson had a separate short meeting

without the generators and returned to the meeting and accepted the offer in principle (subject to Governance agreement and sign off by the decision maker (DDG Operations)).

The generators' proposal, as attached, is acceptable in principle to myself and Jo Macpherson. I discussed it (without divulging the financial component) with our reference group and they support the intent as well. The generators' next step is to await the Department's 'decision', at which point it will go to their ELTs and Boards for approval.

4. Matters to be addressed:

There are matters to be addressed that are consequential to accepting this agreement:

- Continued dialogue with the Waitaki Working Group will be essential. The agreement notes that long-finned eel related matters will be negotiated separately between the Group and the Generators we proposed this and support it. Equally there needs to be agreement reached about governance and which will involve ourselves, the runanga and the generators. Governance will need to be in place before 1 July 2025 so that the strategic plan for the work can be approved
- DOC and the generators will need:
 - A joint letter of intent, signed at a DDG equivalent level. We did this for the negotiation. I will start this but work closely with others including Legal and Planning and Permissions, and obviously with the gen rators.
 - A memorandum of understanding that spe is out the nature of the agreement and how it will operate. There is a lot of huance not described above which is important and needs to be captured.
- This package is essentially a side agreement to the formal consent process. We will need to work in an integrated and transparent way to build this. It comes with some external perception risk this means we may well need to engage with some ENGOs in particular.

5. Recommendations:

- i. That you <u>note</u> the contents of this memo including the Generators' offer (Appendix 1);
- ii. That you <u>note</u> the financial detail of the package shall remain confidential until both parties agree with the package;
- iii. That you <u>agree</u> that package 1, described in 3 above, to be funded at \$2.3m pa (+GST, +2%CPI pa, including OHs and R&D) and jointly governed by the Generators, the papatipu runanga (in a fashion to be co-designed) and DOC be <u>approved in principle</u>;
- iv. That you agree with the consequential requirements outlined in 4 above;
- V. / That we note all of the above to the Director-General and upon agreement the Minister.

Appendix 1 – **Generators' Final Proposal**







Released under Official Infor

From:

To: Ken Hughey; Jo Macpherson; Karina Morrow

Subject: RE: Waitaki Catchment_PACKAGES_June 2022_Short version - DOC-7051828 - updated 21 June.xlsx

Date: Tuesday, 21 June 2022 12:53:00 pm

Hi Ken

The only other thing you might consider is that costs have gone up since these costings were done – around 6-7% - we haven't included that.

That adjustment hasn't been made, so you may want to:

- 1. Set a date on these costs as at Oct 2021 and then get a CPI adjustment to the final agreed figure
- 2. Or add 6% to these figures across all the numbers right now so that the issue goes away this will make them different to those you showed the companies last week.

Number 1 is best, given this agreement may not come into play for another year or more? Cheers

Richard

From: Ken Hughey <khughey@doc.govt.nz> **Sent:** Tuesday, 21 June 2022 12:47 pm

To: Jo Macpherson < jmacpherson@doc.govt.nz>; Karina Morrow < kmorrow@doc.govt.nz>

Cc: Richard Maloney <rmaloney@doc.govt.nz>

Subject: Waitaki Catchment PACKAGES June 2022 Short Version - DOC-7051828 - updated 21 June.xlsx

Team – have done some more work on spreadsheet consistent with Friday and needing to get

What I have added is the change re contingency, but I have explained that in the Focus tab and left a calculation trail for transparency - Richard - we agreed on Friday that contingency can be covered by inflation adjustment and the review process. Hope this is OK? I have added also some explanatory material about overheads – happy to share the email from Dean if necessary? Any comments before I send it out? eleasedui

Ken

From: Richard Maloney
To: Ken Hughey

Subject: Waitaki Catchment_PACKAGES_June 2022_Short version - DOC-7051828 (2).xlsx

Date: Tuesday, 21 June 2022 12:12:47 pm

Attachments: Waitaki Catchment PACKAGES June 2022 Short version - DOC-7051828 (2).xlsx

Here you go

onAcit



Overall focus to meet a significantly lower budget envelope (see note below re flexibility and investment profile)

- o Restricted work to core areas in Lower Waitaki and mid-rivers, and largely excluded the lakes and the upper rivers.
- o Reduced focus to exclude some value protection (e.g., eels, gulls, weirs, trout management for native fish).

ZONE	ZONE NAME	Key focus of work		
ZONE 1	Lower Waitaki, Hakataramea	Restoration of braid plains and side streams, wetland enhancement in catchment, island creation, weed control		
ZOINE 1	Lower Waltaki, Hakataramea	and targeted predator control, knowledge gaps filled.		
ZONE 2	ZONE 2 Lower Ahuriri catchment	Focussed restoration in key exemplar sites on lower river with associated weed and predator management, some		
ZOINE Z	Lower Andrin Catchment	broadscale river weed management, knowledge gaps filled (see note below)		
ZONE 3A	A Tasman Surveillance for, and response to, predators in the Tasman			
ZONE 3B	ZONE 3B Bulleti Hanna and Lawren Ohan Birran	Exemplar sites with predator and weed management in lower river reaches focused on threatened species		
ZOINE 3B	Pukaki, Upper and Lower Ohau Rivers	hotspots, and areas of terrestrial braid plain weeds managed, knowledge gaps filled		
		Focussed restoration in key exemplar sites on river with associated weed and predator management, wetland		
ZONE 4	Tekapo catchment	enhancement in catchment, island creation, wider river targeted weed and predator control, knowl dg gaps		
		filled, restoration of two wetland bay areas on lake.		

Note: <u>Flexibility and investment profile</u> (in the two packages) will enable early and prioritised intervention to maximise conservation delivery. Year 1 will involve some detailed planning, especially for Lower Waitaki work, after which some investment front loading over 2-5 years will enable early 'knock down' (woody weeds and predators) and then a transition to a more ongoing weighted maintenance regime, informed then by Research and Development.

Note: Research and Development (in the two packages) concentrates on monitoring, evaluation and adaptive learning to build cost affectiveness of conservation delivery, and to fill key gaps in understanding. Work will be undertaken by DOC staff, post graduate research students (leveraged with others where possible) and other external providers.

Package	Base scenario	Excluding zones	Excluding activities	Re-added for Package 2	Notes
PACKAGE 1	Scenario 3	Exclude all of Zone 2 (Ahuriri and Lower Lakes) Exclude all of Zone 3a (Hopkins, Dobson, Tasman, Lake Ohau) Exclude mid-Lakes from Zone 3b	Tuna management Weirs and fish work Some wetlands in the wider catchment Black-backed gull control		Tuna management subject to separate agreement between generators and Runanga
PACKAGE 2	Scenario 3	Exclude most of Zone 2 (Upper Ahuriri and Lower Lakes) Exclude most of Zone 3a (Hopkins, Dobson, Lake Ohau) Exclude mid-Lakes from Zone 3b Exclude Cass, Godley, MacAulay from Zone 4	Tuna management Weirs and fish work Some wetlands in the wider catchment Black-backed gull control	Lower Ahuriri selected work Tasman predator surveilence and response	Tuna management subject to separate agreement between

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Average annual direct costs Scenario 3

Zone	Zone short name To		Total (excl GST)	
ZONE 1	Lower Waitaki, Hakataramea \$		587,000	
ZONE 3B	Pukaki, Upper and Lower Ohau Rivers \$ 1,065		1,065,000	
ZONE 4	Tekapo catchment, Lake Tekapo		674,000	
	TOTAL average annual direct cost	\$	2,326,000	

Research and Development included in totals Calcs		Calcs
R&D at 10% would be =	\$	233,000
R&D at 15% would be =	\$	349,000
R&D level in this package = \$310,000 =		13%

Scenario 3 average annual costs (Direct+15%OH+15%contingency)

Zone	Zone short name		al (excl GST)
ZONE 1	Lower Waitaki, Hakataramea		763,000
ZONE 3B	Pukaki, Upper and Lower Ohau Rivers		1,385,000
ZONE 4	Tekapo catchment, Lake Tekapo		876,000
	TOTAL average annual direct + indirect cost	\$	3,0 3,000

Average annual direct costs Scenario 3

Zone	Zone short name	Total	(excl GST)
ZONE 1	Lower Waitaki, Hakataramea	\$	587,000
ZONE 2	Lower Ahuriri catchment	\$	520,000
ZONE 3A	Tasman	\$	65,000
ZONE 3B	Pukaki, Upper and Lower Ohau Rivers	\$	1,065,000
ZONE 4	Tekapo catchment, Lake Tekapo		674,000
	TOTAL average annual direct cost	\$	2,910,000

Research and Development included in totals	Calcs
R&D at 10% would be =	\$ 291,000
R&D at 15% would be =	\$ 437,000
R&D level in this package = \$435,714 =	15%

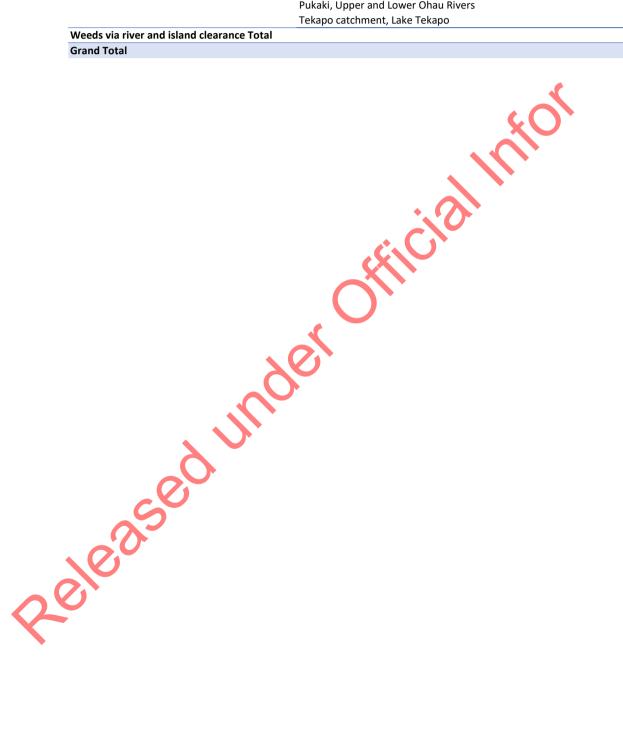
Scenario 3 average annual costs (Direct+15%OH+15%contingency)

Zone	Zone short name	Tota	al (excl GST)
ZONE 1	Lower Waitaki, Hakataramea	\$	763,000
ZONE 2	Lower Ahuriri catchment \$		676,000
ZONE 3A	Tasman :		84,000
ZONE 3B	Pukaki, Upper and Lower Ohau Rivers \$ 1,38		1,385,000
ZONE 4	ZONE 4 Tekapo catchment, Lake Tekapo		876 000
	TOTAL average annual direct + indirect cost	\$	3 82,000

Weeds costs Package 1	Zone short name	Total	
Weeds via river and island clearance	Lower Waitaki	\$	6,686
	Pukaki, Upper and Lower Ohau Rivers	\$	34,221
	Tekapo catchment, Lake Tekapo	\$	59,057
Weeds via river and island clearance Total		\$	99,964
All other activities	Lower Waitaki	\$	240,166
	Pukaki, Upper and Lower Ohau Rivers	\$	180,643
	Tekapo catchment, Lake Tekapo	\$	241,740
All other activities Total		\$	662,549
Direct weed control	Lower Waitaki	\$	340,000
	Pukaki, Upper and Lower Ohau Rivers	\$	850,000
	Tekapo catchment, Lake Tekapo	\$	331,214
Direct weed control Total		\$,521 214
Grand Total		Ś 🦱	2,283,727



Sum of Average annual cost S3		
Weeds costs Package 2	Zone short name	Total
All other activities	Ahuriri catchment	\$ 389,314
	Lower Waitaki	\$ 187,366
	Pukaki, Upper and Lower Ohau Rivers	\$ 180,643
	Tasman	\$ 64,286
	Tekapo catchment, Lake Tekapo	\$ 241,740
All other activities Total		\$ 1,063,349
Direct weed control	Ahuriri catchment	\$ 104,500
	Lower Waitaki	\$ 340,000
	Pukaki, Upper and Lower Ohau Rivers	\$ 850,00
	Tekapo catchment, Lake Tekapo	\$ 331,21
Direct weed control Total		\$ 1, <mark>625</mark> ,714
Weeds via river and island clearance	Ahuriri catchment	\$ 25,800
	Lower Waitaki	\$ 59,480
	Pukaki, Upper and Lower Ohau Rivers	\$ 34,22:
	Tekapo catchment, Lake Tekapo	\$ 59,05
Weeds via river and island clearance Total		\$ 178,564
Grand Total		\$ 2,867,62



From: Richard Maloney

To: <u>Ken Hughey</u>; <u>Hughey</u>, <u>Kenneth</u>

Subject: FW: Waitaki Catchment_PACKAGES_June 2022_Short version - DOC-7051828 - updated 20 June.xlsx

Date: Tuesday, 21 June 2022 11:26:50 am

Hi Ken

Dean sent this through to you earlier today – looks good to run at 15% OH, he has costed this out as below ...

R

From: Dean Nelson <dnelson@doc.govt.nz>

Sent: Tuesday, 21 June 2022 10:02 am

To: Hughey, Kenneth 9 (2) (a)

Cc: Richard Maloney <rmaloney@doc.govt.nz>; Karina Morrow <kmorrow@doc.govt.nz>

Subject: RE: Waitaki Catchment_PACKAGES_June 2022_Short version - DOC-7051828 - updated

20 June.xlsx

Hi Ken,

I realise this needs to get back to you so in lieu of more accurate information on overhead costs, I have made the following calculations based on what I could find.

Some assumptions. I believe that there will need to be two full time weed sprayers (currently 0.5 FTE for PRR which is not adequate) – B band. Public holidays and annual leave considered overheads

Separate my position back into two Senior Rangers so there is one full time Senior Ranger(E Band) for PRR. Full salary an overhead

Supervisor/contact manager position (E Band) With the extra staff and much bigger emphasis on weeds there needs to be a role like this. Full salary in overhead.

Minimum of three C band rangers (currently two). Public holidays and annual leave considered overheads

Three 4WD vehicles. One would be a dedicated weed spraying vehicle with tank and sprayer.

One car/RAV 4 type vehicle. Overheads include lease and all annual running/maintenance costs.

Vehicles up here do long miles

PRR currently pays \$20,000 for office overheads but has paid that for as long as I can remember. I feel that would need to be significantly increased to reflect increased staff and use of the yard facilities etc.

So based on all that these are the overhead costs that I have come up with.

Senior Ranger and Supervisor/contract manager salaries \$180,000

3 x C band rangers A/L and public holidays \$21,500

2 x B Band ra gers A/L and public holidays \$12,500

Staff uniforms, PPE and equipment allowances \$5000

O fice space, computers, yard space and facilities, electricity, insurance etc \$40,000

hree 4WD vehicles plus one car leases @ \$1000/month \$48000

Three 4 WD annual running/maintenance costs \$24,000

One car annual running/maintenance costs \$6000

Total \$337,000

Based on the package 1 figure in your table Ken, 15% overhead is \$348,900 so we are within about \$12k. Anything to add or increase in these amounts above?

Cheers, Dean

From: Hughey, Kenneth 9 (2) (a) >

Sent: Tuesday, 21 June 2022 8:25 am **To:** Dean Nelson < dnelson@doc.govt.nz>

Subject: Fwd: Waitaki Catchment_PACKAGES_June 2022_Short version - DOC-7051828 - updated 20 June.xlsx

Sent from Workspace ONE Boxer

----- Forwarded message -----

From: "Hughey, Kenneth" < (2) (a) >

Date: 20/06/2022 12:01 pm

Subject: Waitaki Catchment PACKAGES June 2022 Short version - DOC-7051828 - updated 20

June.xlsx

To: Richard Maloney < rmaloney@doc.govt.nz >

Cc: Karina Morrow kmorrow@doc.govt.nz, Jo Macpherson jmacpherson@doc.govt.nz, Dean Nelson kmorrow@doc.govt.nz, Colin O'Donnell CODONNELL@doc.govt.nz, Nicki Atkinson@doc.govt.nz, Ken Hughey khughey@doc.govt.nz

Richard (et al for noting)

Following our Friday negotiation meeting I have done some edits to the short version spread sheet. In summary and to check in with you:

Focus tab: I have included two notes concerning 1. Flexibility and Investment Profile; 2.

Research and Development. It is important to spell out our intent here, but to leave both a bit open (in my view). Are you happy with this wording?

Exclusions tab: I have added the Hakataramea in Zone 1 40KR

Weeds P1 and P2 tabs – please put a comma into Pukaki, Upper and Lower Ohau rivers, as just presented.

I'm aiming to get his back to the generators with other financial material either late tomorrow or Wednesday morning.

Thanks Ken

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From: <u>Herb Familton</u>

To: <u>Karina Morrow</u>; <u>Ken Hughey</u>

Subject: FW: Lower Waitaki River Conservation and Restoration - Draft Report

Date: Monday, 20 June 2022 3:55:06 pm

Attachments: Instream.2022.Lower Waitaki Restoration Costing.xlsx

<u>Instream.2022.Lower Waitaki.docx</u> <u>Instream.2022.Lower Waitaki.pdf</u>

I presume you had this report. First time I'd seen it.

Herh

From: Clinton Webb <cwebb@instream.co.nz>

Sent: Monday, 28 February 2022 1:26 pm

To: Brad Edwards <bedwards@doc.govt.nz>; Marine Richarson <mri>mricharson@doc.govt.nz>; Rosemary Miller <rmiller@doc.govt.nz>; Alexander Macdonald <alemacdonald@doc.govt.nz>

Cc: DLVC INSTREAM CONSULTING LTD <gburrell@instream.co.nz>

Subject: Lower Waitaki River Conservation and Restoration - Draft Report

Hi all,

Please find our attached draft report and restoration matrix.

The restoration costings are complete, except we are still waiting on a price estimate for the bird tracking tags. That means there is still some uncertainty around the coot of the bird meta-population study. I have followed up and will update as soon as I get the information

Thank you for the opportunity to be involved with this highly rewarding project. We look forward to hearing your feedback.

Ngā mihi nui,

Clinton

Clinton Webb | Freshwater Ecologist | Instream Consulting Limited 314 Tuam Street, PO Box 1200, Christchurch 8140, New Zealand | E: cwebb@instream.co.nz | www.instream.co.nz

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Project name Lower Waitaki River Catchment Conservation and Restoration

DOC contacts Marine Richardson (mricharson@doc.govt.nz)

Rosemary Miller (rmiller@doc.govt.nz)

Alexander Macdonald (alemacdonald@doc.govt.nz)

Brad Edwards (bedwards@doc.govt.nz)

Contractor Instream Consulting Ltd

Contractor contacts Greg Burrell (gburrell@instream.co.nz)

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Clinton Webb (cwebb@instream.co.nz)

Contractor project number

Date of data submission

21310201 28-Feb-22 Project name Lower Waitaki River Catchment Conservation and Restoration

DOC contacts Marine Richardson (mricharson@doc.govt.nz)

Rosemary Miller (rmiller@doc.govt.nz)

Alexander Macdonald (alemacdonald@doc.govt.nz)

Brad Edwards (bedwards@doc.govt.nz)

Contractor Instream Consulting Ltd

Contractor contacts Greg Burrell (gburrell@instream.co.nz)

Clinton Webb (cwebb@instream.co.nz)

Contractor project number21310201Date of data submission28-Feb-22



Methods The Restoration Matrix was produced by Instream, and it supports a report of conservation values, pressures, and restoration opportunities in the Lower Waitaki River catchment.

> Costed items reflect restoration actions identified as priorities following a literature review, interviews with people from various agencies, and a costing workshop held between Instream and DOC on 28 January 2022.

The scope included providing rough, order of magnitude cost estimates for priority restoration activities.

Items were costed by contacting experts with relevant experience, suppliers, and using our expert opinions. To produce these costings, a variety of assumptions were made. These are listed against each line item.

For items including staff time, consultants were costed at \$120/hr, and DOC staff at \$33/ hr (maximum C Band ranger rate).

A default overhead of 12.5% was applied to the total costs.

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Total costs have been rounded to the nearest thousand, to avoid indicating false precision.

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From: Hughey, Kenneth
To: Richard Maloney

Cc: Karina Morrow; Jo Macpherson; Dean Nelson; Colin O"Donnell; Nicki Atkinson; Ken Hughey

Subject: Waitaki Catchment_PACKAGES_June 2022_Short version - DOC-7051828 - updated 20 June.xlsx

Date: Monday, 20 June 2022 12:01:57 pm

Attachments: Waitaki Catchment PACKAGES June 2022 Short version - DOC-7051828 - updated 20 June.xlsx

Richard (et al for noting)

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- 1. Focus tab: I have included two notes concerning 1. Flexibility and Investment Profile; 2. Research and Development. It is important to spell out our intent here, but to leave both a bit open (in my view). Are you happy with this wording?
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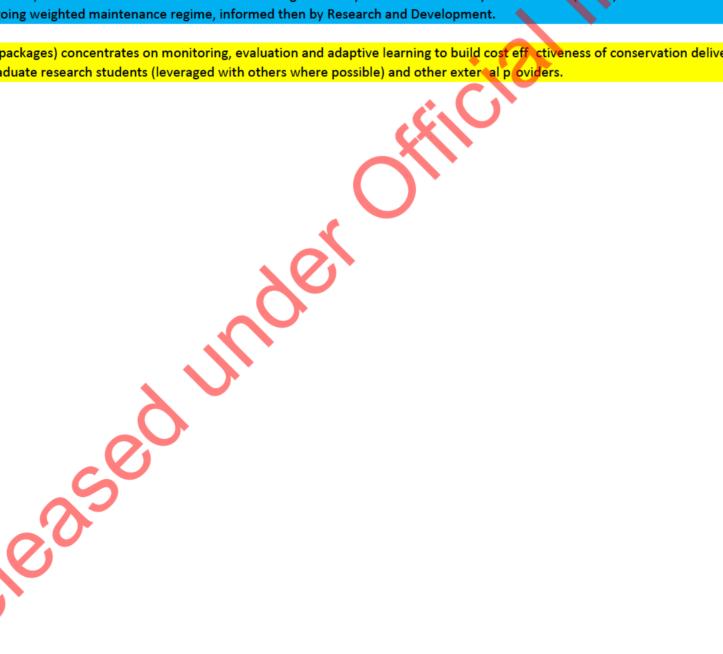
Overall focus to meet a significantly lower budget envelope (see note below re flexibility and investment profile)

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ZONE	ZONE NAME	Key focus of work
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ZOINE 1	Lower Waltaki	and targeted predator control, knowledge gaps filled.
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ZONE Z	Lower Anurin catchment	broadscale river weed management, knowledge gaps filled (see note below)
ZONE 3A	3A Tasman Surveillance for, and response to, predators in the Tasman	
ZONE 3B	ONE 3D Dubuki Harraman di assas Okas Bisana	Exemplar sites with predator and weed management in lower river reaches focused on threatened species
ZOINE 3B	Pukaki, Upper and Lower Ohau Rivers	hotspots, and areas of terrestrial braid plain weeds managed, knowledge gaps filled
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ZONE 4	Tekapo catchment	enhancement in catchment, island creation, wider river targeted weed and predator control, knowl dg gaps
		filled, restoration of two wetland bay areas on lake.

Note: Flexibility and investment profile (in the two packages) will enable early and prioritised intervention to maximise conservation delivery. Year 1 will involve some detailed planning, especially for Lower Waitaki work, after which some investment front loading over 2-5 years will enable early 'knock-down (woody weeds and predators) and then a transition to a more ongoing weighted maintenance regime, informed then by Research and Development.

Note: Research and Development (in the two packages) concentrates on monitoring, evaluation and adaptive learning to build cost effectiveness of conservation delivery. Work will be undertaken by DOC staff, post graduate research students (leveraged with others where possible) and other external providers.



Package	Base scenario	Excluding zones	Excluding activities	Re-added for Package 2	Notes
PACKAGE 1	Scenario 3	Exclude Hakataramea from Zone 1 (Lower Waitaki) Exclude all of Zone 2 (Ahuriri and Lower Lakes) Exclude all of Zone 3a (Hopkins, Dobson, Tasman, Lake Ohau) Exclude mid-Lakes from Zone 3b	Tuna management Weirs and fish work Some wetlands in the wider catchment Black-backed gull control		Tuna management subject to separate agreement between generators and Runanga
PACKAGE 2	Scenario 3	Exclude Hakataramea from Zone 1 (Lower Waitaki) Exclude most of Zone 2 (Upper Ahurri and Lower Lakes) Exclude most of Zone 3a (Hopkins, Dobson, Lake Ohau) Exclude mid-Lakes from Zone 3b	Tuna management Weirs and fish work Some wetlands in the wider catchment Black-backed gull control	Lower Ahuriri selected work Tasman predator surveilence and response	Tuna management subject to separate agreement between

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Average annual direct costs Scenario 3

Zone	Zone short name	Tota	l (excl GST)
ZONE 1	Lower Waitaki	\$	587,000
ZONE 3B	Pukaki Upper and Lower Ohau Rivers	\$	1,065,000
ZONE 4	Tekapo catchment, Lake Tekapo	\$	674,000
	TOTAL average annual direct cost	\$	2,326,000

Research and Development included in totals	Calcs	
R&D at 10% would be =	\$	233,000
R&D at 15% would be =	\$	349,000
R&D level in this package = \$310,000 =		13%

Scenario 3 average annual costs (Direct+15%OH+15%contingency)

Zone	Zone short name	Tot	Total (excl GST)	
ZONE 1	Lower Waitaki	\$	763,000	
ZONE 3B	Pukaki Upper and Lower Ohau Rivers	\$	1,385,000	
ZONE 4	Tekapo catchment, Lake Tekapo	\$	876,000	
	TOTAL average annual direct + indirect cost	\$	3,0 3,000	

Average annual direct costs Scenario 3

8				
Zone	Zone short name	Tota	l (excl GST)	
ZONE 1	Lower Waitaki	\$	587,000	
ZONE 2	Lower Ahuriri catchment	\$	520,000	
ZONE 3A	Tasman	\$	65,000	
ZONE 3B	Pukaki Upper and Lower Ohau Rivers	\$	1,065,000	
ZONE 4	Tekapo catchment, Lake Tekapo	\$	674,000	
	TOTAL average annual direct cost	\$	2,910,000	

Research and Development included in totals Calcs		Calcs
R&D at 10% would be =	\$	291,000
R&D at 15% would be =	\$	437,000
R&D level in this package = \$435,714 =		15%

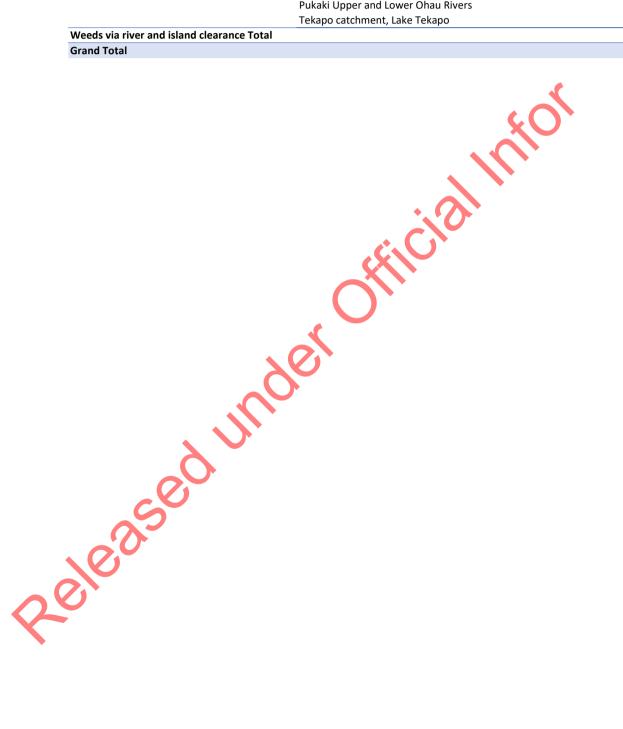
Scenario 3 average annual costs (Direct+15%OH+15%contingency)

Zone	Zone short name	Tota	l (excl GST)
ZONE 1	Lower Waitaki	\$	763,000
ZONE 2	Lower Ahuriri catchment	\$	676,000
ZONE 3A	Tasman	\$	84,000
ZONE 3B	Pukaki Upper and Lower Ohau Rivers	\$	1,385,000
ZONE 4	Tekapo catchment, Lake Tekapo	\$	876 000
	TOTAL average annual direct + indirect cost	\$	3 82,000

Weeds costs Package 1	Zone short name	Total	
Weeds via river and island clearance	Lower Waitaki	\$	6,686
	Pukaki Upper and Lower Ohau Rivers	\$	34,221
	Tekapo catchment, Lake Tekapo	\$	59,057
Weeds via river and island clearance Total		\$	99,964
All other activities	Lower Waitaki	\$	240,166
	Pukaki Upper and Lower Ohau Rivers	\$	180,643
	Tekapo catchment, Lake Tekapo	\$	241,740
All other activities Total		\$	662,549
Direct weed control	Lower Waitaki	\$	340,000
	Pukaki Upper and Lower Ohau Rivers	\$	850,000
	Tekapo catchment, Lake Tekapo	\$	331,214
Direct weed control Total		\$,521 214
Grand Total		\$ 🦱	2,283,727



Sum of Average annual cost S3		
Weeds costs Package 2	Zone short name	Total
All other activities	Ahuriri catchment	\$ 389,314
	Lower Waitaki	\$ 187,366
	Pukaki Upper and Lower Ohau Rivers	\$ 180,643
	Tasman	\$ 64,286
	Tekapo catchment, Lake Tekapo	\$ 241,740
All other activities Total		\$ 1,063,349
Direct weed control	Ahuriri catchment	\$ 104,500
	Lower Waitaki	\$ 340,000
	Pukaki Upper and Lower Ohau Rivers	\$ 850,000
	Tekapo catchment, Lake Tekapo	\$ 331,214
Direct weed control Total		\$ 1, 625 ,714
Weeds via river and island clearance	Ahuriri catchment	\$ 25,800
	Lower Waitaki	\$ 59,486
	Pukaki Upper and Lower Ohau Rivers	\$ 34,221
	Tekapo catchment, Lake Tekapo	\$ 59,057
Weeds via river and island clearance Total		\$ 178,564
Grand Total		\$ 2,867,627



From: Richard Maloney

To: Hughey, Kenneth; Karina Morrow; Susan Newell; Colin O"Donnell; Michael Hayward; Herb Familton; Ken

Hughey, Nicki Atkinson, Dean Nelson

Cc: <u>Jo Macpherson</u>

Subject: RE: Quick update on today"s mtg with generators

Date: Monday, 20 June 2022 10:22:49 am

Sounds like progress Ken.

Yes, I'd be happy if we landed between package levels - we can make a difference with that level of resource, if we are careful about expectations and are strategic in prioritising what we chose to undertake first based on greatest ecological outcomes gained.

Good luck for the next session.

Cheers Richard

From: Hughey, Kenneth 9 (2) (a)

Sent: Friday, 17 June 2022 5:33 pm

To: Karina Morrow kmorrow@doc.govt.nz; Richard Maloney kmorrow@doc.govt.nz; Susan Newell kmorrow@doc.govt.nz; Michael Hayward kmorrow@doc.govt.nz; Dean Nelson kdoc.govt.nz; Dean Nelson kdoc.g

Cc: Jo Macpherson < jmacpherson@doc.govt.nz>

Subject: RE: Quick update on today's mtg with generators



From: Karina Morrow < kmorrow@doc.govt.nz>

Sent: Friday, 17 June 2022 2:24 PM

To: Richard Maloney <<u>rmaloney@doc.govt.nz</u>>; Susan Newell <<u>snewell@doc.govt.nz</u>>; Colin O'Donnell <<u>CODONNELL@doc.govt.nz</u>>; Michael Hayward <<u>mhayward@doc.govt.nz</u>>; Herb Familton <<u>hfamilton@doc.govt.nz</u>>; Ken Hughey <<u>khughey@doc.govt.nz</u>>; Nicki Atkinson <<u>natkinson@doc.govt.nz</u>>; Dean Nelson <<u>dnelson@doc.govt.nz</u>>

Cc: Jo Macpherson < imacpherson@doc.govt.nz >; Hughey, Kenneth < (2) (2) (a)

Subject: RE: Quick update on today's mtg with generators

Caution: This email originated from outside our organisation. Do not click links or open attachments unless you recognize the sender and know the content is safe.

9 (2) (g) (i)

Sent from Workspace ONE Boxer

On 17/06/2022 2:21 pm, Herb Familton < hfamilton@doc.govt.nz > wrote:

Sounds promising. I liked the 9 (2) (j) question....

Herb

From: Karina Morrow kmorrow@doc.govt.nz>

Sent: Friday, 17 June 2022 2:05 pm

To: Ken Hughey < khughey@doc.govt.nz; Richard Maloney < mailton@doc.govt.nz; Susan Newell < snewell@doc.govt.nz; Dean Nelson < dnelson@doc.govt.nz; Colin O'Donnell < CODONNELL@doc.govt.nz; Michael Hayward < mhayward@doc.govt.nz; Nicki Atkinson < natkinson@doc.govt.nz>

Cc: Jo Macpherson < imacpherson@doc.govt.nz >; Hughey, Kenneth < 9 (2) (a)

Subject: RE: Quick update on today's mtg with generators

Hi Ken

Yep, spot on – they did say they would come back with a "considered response" to our proposal but felt close to landing it.

Dean will do some work on the Over Head on Monday Ken.

Karina

From: Ken Hughey < khughey@doc.govt.nz>

Sent: Friday, 17 June 2022 1:57 pm

To: Richard Maloney <<u>rmaloney@doc.govt.nz</u>>; Herb Familton <<u>hfamilton@doc.govt.nz</u>>; Susan Newell <<u>snewell@doc.govt.nz</u>>; Dean Nelson <<u>dnelson@doc.govt.nz</u>>; Colin O'Donnell <<u>CODONNELL@doc.govt.nz</u>>; Michael Hayward <<u>mhayward@doc.govt.nz</u>>; Nicki Atkinson <<u>natkinson@doc.govt.nz</u>>

Cc: Jo Macpherson < imacpherson@doc.govt.nz >; Karina Morrow < kmorrow@doc.govt.nz >; Hughey, Kenneth < (2) (2) (a)

Subject: Quick update on today's mtg with generators

Dear All

- 1. I sent out the two packages yesterday first to at Meridian so I could have a phone chat with him before having more widely. I was pleased I did that as a positive heads up to him and affirmation to me that we are heading in the right direction.
- 2. Later in the day sent the packages to all on the negotiation meeting for today
- 3. That meeting began with me talking our way through the package: approach, exclusions, research, etc that worked well and I was able, with support from Karina and Jo, I think to explain all points of clarification. I pointed out that while package 1 will deliver I remain concerned about some missing elements and also about Ahuriri and Tasman work we had a positive chat about that concern and how it might be addressed
- Considerable discussion occurred around the research, and the OH and contingency costings we got there on the research but I will add a bit of wording to the spreadsheet, and Karina is going to do some work on the OH and me the contingency. I think the parties are comfortable with where we are at, at least roughly.
- 5. from Genesis then posed a great question which went roughly like: Would DOC be happy if we landed somewhere in this package space. We had a good discussion about this which I think indicated to us that we are getting very close to landing something significant, although I have been over confident before. But I think there was a pretty good feeling in the Teams Room (Jo and Karina?)?
- 6. We left with work to do and mostly it is described above, with some other work in the governance space. We are meeting again next Wednesday trying to get to an agreement

before I leave DOC on the 30th! This meeting will require us to change the time slightly for our update meeting.

I think those were the main points?
Cheers and thanks again for your support.
Ken

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From: Richard Maloney
To: Ken Hughey
Subject: Waitaki weed costs

Date: Thursday, 16 June 2022 9:12:10 am

Attachments: Waitaki Catchment PACKAGES June 2022 Short version - DOC-7051828.xlsx

Hi Ken

I've added two tabs for the weeds, one for each package.

I've given you the direct weed work, and the indirect (ie island and river clearance work) separately, and have given this for each site.

Hope that helps.

Richard



From: Karina Morrow

To: <u>Ken Hughey</u>; <u>Jo Macpherson</u>

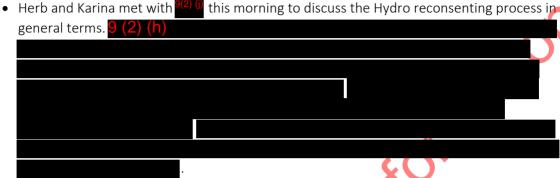
Subject: Waitaki Negotiations Meeting 15/6/22 Important Points

Date: Wednesday, 15 June 2022 3:42:55 pm

Importance: High

Hi Jo/Ken

There were a few important discussions at today's Waitaki negotiations Meeting which I think are worth bringing to your attention. I did record the session but I only remembered to do this about a quarter of the way through so will cover all points below:



- We discussed the existing weed control that (12)(1) undertakes as part of its global consent in the river network. It is our view that this should be retained (i.e. that we would be wanting to undertake this as part of PRR going forward). Richard had details on this.
- If negotiations are not favourable (based on the new packages Richard has designed) we would be in a good position to suggest to the Generators that through the consent process we would be arguing for flows in the Ohau, Pukaki and Lower Tekapo to support habitat (for which we have good evidence around). This would obviously impact on generating ability for the Generators (we feel like this is a strong negotiation point)
- It is critical to understand whether the current flows in the Ohau form part of the existing environment and therefore are proposed to be retained by the Generators. If these are to be stopped/re-negotiated this could impact on habitat. As above, it would be good to understand if the recreation flows in the Tekapo and Pukaki form part of the existing environment and are to be retained or are being renegotiated with other parties. If they are not to be retain d this would suggest they are picking and choosing a bit what is the "Existing Environment". Would be good to ask them this as early as possible.

Most of this is covered in the recording which I have sent through a link to. Happy to discuss details as is Richard.

Karina

SISQ.

From: Rosemary Miller

To: <u>Ken Hughey</u>; <u>Hughey</u>, <u>Kenneth</u>

Subject: FW: Ken"s view of the world - 30 May 2022 **Date:** Wednesday, 15 June 2022 1:25:28 pm

Attachments: Copy of Approximate current costs Waitaki catchment June 2022 NA edits.xlsx

Lower Waitaki River Conservation and Restoration - Draft Report.msg

Hi Ken

I am just working through the briefing. I note your comment re WE have completed, thanks to Richard Maloney and others, a review of conservation related investment with links to freshwater in the catchment. So just wanted to double check with you – have you used the Instream Consulting costings (this was additional work we contract them to do through Nga Awa over and above the baseline report).

Brad has provided me with a good summary of the significant impacts that the mitigation package is attempting to resolve. I have summarised his comments into this para:

1. The operation of the hydrodams in the mid Waitaki results in significant impacts downstream, e.g. flow releases swamping nesting threatened birds, loss of native herbs and grasslands due to the weed spraying programme, loss of large floods which would have naturally cleared the river, impacts to migratory fish lifecycles through loss of access and direct mortality of migrants through the turbines, change to the hydrological cycles and geomorphological processes and increased wider braid plain encroachment encouraged by flood mediation of dams.

So just wanted you to see that as it provides useful context to the negotiation section. I've got the attached from Nicki, so will work out where and how to weave it into the briefing story.

Cheers Rosemary

From: Nicki Atkinson <natkinson@doc.govt.nz>

Sent: Wednesday, 15 June 2022 11:36 am **To:** Rosemary Miller < rmiller @doc.gov nz>

Subject: FW: Ken's view of the word - 30 May 2022

From: Nicki Atkinson

Sent: Wednesday, 1 June 2022 4:43 pm

To: Richard Maloney < representation of the control of the contr

Cc: Dean Nelson doc.govt.nz; Colin O'Donnell codonNELL@doc.govt.nz; Hughey, Kenneth kenneth-square; Karina Morrow kenneth-square; Herb Familton

<hfamilton@doc.govt.nz>

Subject: RE: Ken's view of the world - 30 May 2022

Hi Ken

I've added the bio costs to Richard's spreadsheet (attached), both the TSU costs as well as the costs across the Freshwater teams. There's not much in the way of Nga Awa work happening in the Waitaki at the moment, it's still in the 'set-up/development' phase but there's also a lot of other work happening nationally that would apply to the Waitaki, e.g. our work on understanding/improving trap and transfer for tuna. For these pieces of work I've pro-rated the cost based on the number of DOC regions the work is applicable too. You can choose whether to include this or not.

I've also included the Geraldine Ops work that I know about.

I think I sent this to you awhile back but will add it again in case you missed it – Nga Awa has commissioned a report on the Lower Waitaki and how to restore it, with costing for the restoration work, so highly relevant & useful for this work. See attached.

Some other costs comparisons that may be of interest – Nga Awa got \$48M in Job for Nature

money for fencing and planting and pest control across 6 river sites. One of these was the Rangatata catchment (both upper and lower) which got \$20M of the \$48M over four years. And to answer your question re Ngai Tahu engagement as I understand from Brad Edwards, the Nga Awa River Ranger, they have had some initial conversations with the Runanga and heard that their focus was on the consenting process for the time being, they have also done their own catchment plan and are hoping agencies would come in to be part of this in time. Brad's focus currently in more on the Rangatata River, it's intended that the Waitaki Nga Awa work will develop more over coming years, alongside Iwi.

Thanks, Nicki

From: Richard Maloney < rmaloney@doc.govt.nz >

Sent: Wednesday, 1 June 2022 12:21 pm **To:** Ken Hughey < khughey@doc.govt.nz >

Cc: Dean Nelson < doc.govt.nz>; Nicki Atkinson < natkinson@doc.govt.nz>; Com
O'Donnell < (a) (a) >; Karina

Morrow <<u>kmorrow@doc.govt.nz</u>>; Herb Familton <<u>hfamilton@doc.govt.nz</u>≯

Subject: FW: Ken's view of the world - 30 May 2022

Hi Ken

Wasn't sure if you actually wanted a response to this, so I haven't commented on your text. I have had a look at the \$\$ contributions you have listed – its n t clear yet what this list is supposed to represent with regard to combinations of current, ongoing, regular costs, but it does seem to be missing a number of relevant things.

Therefore, I have taken your list, and put it into excel, and have added the most obvious gaps (still needs to add int the ones that you may get from Nicki and others in Bio Gp via your request). There are some missing values that it would be useful for you and Dean to collate to complete this.

Hope that helps.

Cheers

Richard

From: Ken Hughey < khughey@doc.govt.nz >

Sent: Tuesday, 31 May 2022 11:21 am

To: Dean Nelson < helion@doc.govt.nz; Nicki Atkinson < natkinson@doc.govt.nz; Colin O'Donnell < codoNNELL@doc.govt.nz; Richard Maloney < rmaloney@doc.govt.nz>

Cc: Adrian Gilby ; Aaron McKay ; Hughey, Kenneth

 $<\underline{k}$ 9 (2)(a) $\underline{z}>$

Subject: Ken's view of the world - 30 May 2022

H Team – please find attached a think piece as a starter for Thursday. This is not meant to be the definitive view of the world, but hopefully something to respond to.

Note I will not be at tomorrow's catch up meeting, and that after our workshop on Thursday I am heading off to meet with the 3 papatipu runanga at 1pm

Thanks and looking forward to Thursday morning.

Ken

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From: Richard Maloney
To: Ken Hughey

Subject: Waitaki Catchment_PACKAGES_June 2022_Short version - DOC-7051828.xlsx

Date: Wednesday, 15 June 2022 11:16:24 am

Attachments: Waitaki Catchment PACKAGES June 2022 Short version - DOC-7051828.xlsx

Have clarified those points and saved as new version in DOCCM – is clarification text okay?

R



Overall focus to meet a significantly lower budget envelope

 Restricted work to core areas in Lower Waitaki and mid-rivers, and largely excluded the lakes and the upper rivers.

ZONE	ZONE NAME	Key focus of work
70NF 1	Lower Waitaki	Restoration of braid plains and side streams, wetland enhancement in catchment, island creation, weed control
ZONE 1	Lower Waitaki	and targeted predator control, knowledge gaps filled.
ZONE 2	Lower Ahuriri catchment	Focussed restoration in key exemplar sites on river with associated weed and predator management, some
ZOINE Z	Lower Andrin Catchinent	broadscale river weed management, knowledge gaps filled
ZONE 3A	Tasman	Survelience for, and response to, predators in the Tasman
ZONE 3B	Pukaki, Upper and Lower Ohau Rivers	Exemplar sites with predator and weed management in lower river reaches focused on threatened species
ZOINE 3B	Pukaki, Opper and Lower Onau Rivers	hotspots, and areas of terrestrial braid plain weeds managed, knowledge gaps filled
		Focussed restoration in key exemplar sites on river with associated weed and predator management, wetland
ZONE 4	Tekapo catchment	enhancement in catchment, island creation, wider river targeted weed and predator control, knowl dg gaps
		filled, restoration of two bay areas on lake.



Package	Base scenario	Excluding zones	Excluding activities	Re-added for Package 2	Notes
PACKAGE 1	Scenario 3	Exclude all of Zone 2 (Ahuriri and Lower Lakes) Exclude all of Zone 3a (Hopkins, Dobson, Tasman, Lake Ohau) Exclude mid-Lakes from Zone 3b Exclude Cass, Godley, MacAulay from Zone 4	Tuna management Weirs and fish work Some wetlands in the wider catchment Black-backed gull control		Tuna management subject to separate agreement between generators and Runanga
PACKAGE 2	Scenario 3	Exclude most of Zone 2 (Upper Ahuriri and Lower Lakes) Exclude most of Zone 3a (Hopkins, Dobson, Lake Ohau) Exclude mid-Lakes from Zone 3b Exclude Cass, Godley, MacAulay from Zone 4	Tuna management Weirs and fish work Some wetlands in the wider catchment Black-backed gull control	Lower Ahuriri selected work Tasman predator surveilence and response	Tuna management subject to separate agreement between

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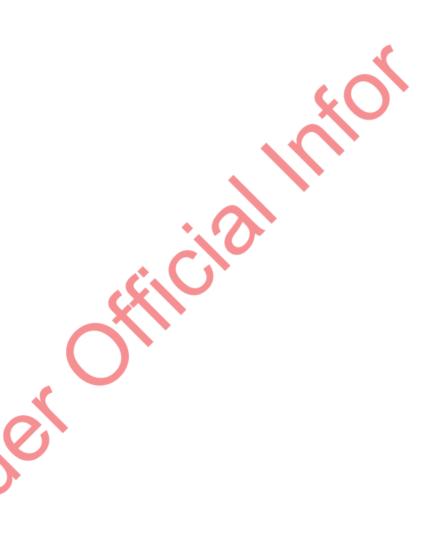
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..sue agreement between
generators and Runanga

Zone	Zone short name	Tota	l (excl GST)
ZONE 1	Lower Waitaki	\$	587,000
ZONE 3B	Pukaki Upper and Lower Ohau Rivers	\$	1,065,000
ZONE 4	Tekapo catchment, Lake Tekapo	\$	674,000
	TOTAL average annual direct cost	\$	2,326,000

Research and Development included in totals	Calcs	
R&D at 10% would be =	\$	233,000
R&D at 15% would be =	\$	349,000
R&D level in this package = \$310,000 =		13%

Scenario 3 average annual costs (Direct+15%OH+15%contingency)

Zone	Zone short name	Total (excl GST)	
ZONE 1	Lower Waitaki	\$	763,000
ZONE 3B	Pukaki Upper and Lower Ohau Rivers	\$	1,385,000
ZONE 4	Tekapo catchment, Lake Tekapo	\$	876,000
	TOTAL average annual direct + indirect cost	\$	3,023,000



Zone	Zone short name	Tota	l (excl GST)		
ZONE 1	Lower Waitaki	\$	587,000		
ZONE 2	Lower Ahuriri catchment	\$	520,000		
ZONE 3A	Tasman	\$	65,000		
ZONE 3B	Pukaki Upper and Lower Ohau Rivers	\$	1,065,000		
ZONE 4	Tekapo catchment, Lake Tekapo	\$	674,000		
	TOTAL average annual direct cost	\$	2,910,000		

Research and Development included in totals	Calcs	
R&D at 10% would be =	\$	291,000
R&D at 15% would be =	\$	437,000
R&D level in this package = \$435,714 =		15%

Scenario 3 average annual costs (Direct+15%OH+15%contingency)

Zone	Zone short name	Tota	ıl (excl GST)
ZONE 1	Lower Waitaki	\$	763,000
ZONE 2	Lower Ahuriri catchment	\$	676,000
ZONE 3A	Tasman	\$	84,000
ZONE 3B	Pukaki Upper and Lower Ohau Rivers	\$	1,385,000
ZONE 4	Tekapo catchment, Lake Tekapo	\$	876,000
	TOTAL average annual direct + indirect cost	\$	3,782,000



From: Richard Maloney
To: Ken Hughey

Subject: Waitaki Catchment_PACKAGES_June 2022_Short version - DOC-7051828.xlsx

Date: Wednesday, 15 June 2022 9:04:59 am

Attachments: Waitaki Catchment PACKAGES June 2022 Short version - DOC-7051828.xlsx

Importance: High

Kia ora Ken

Attached and in DOCCM (restricted access).

This is the short version. Let me know if you need anything else, or if its not making sense.

Cheers

Richard



Overall focus to meet a significantly lower budget envelope

 Restricted work to core areas in Lower Waitaki and mid-rivers, and largely excluded the lakes and the upper rivers.

ZONE	ZONE NAME	Key focus of work
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PACKAGE 2 Scenario 3	Exclude most of Zone 2 (Upper Ahuriri and Lower Lakes) Exclude most of Zone 3a (Hopkins, Dobson, Lake Ohau) Exclude mid-Lakes from Zone 3b Exclude Cass, Godley, MacAulay from Zone 4	Tuna management Weirs and fish work Some wetlands in the wider catchment Black-backed gull control	Lower Ahuriri selected work Tasman predator surveilence and response

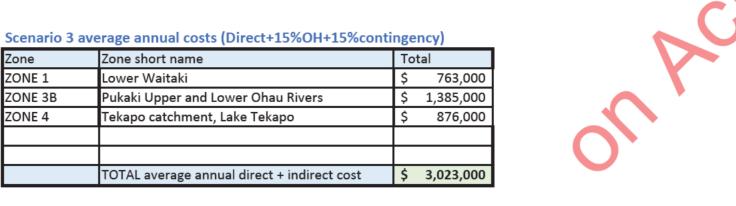
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onAct

Zone	Zone short name	To	tal
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ZONE 3B	Pukaki Upper and Lower Ohau Rivers	\$	1,065,000
ZONE 4	Tekapo catchment, Lake Tekapo		674,000
	TOTAL average annual direct cost	\$	2,326,000

Research and Development inclusions	Calcs
R&D at 10% would be =	\$ 233,000
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Our R&D level = \$310,000 =	13%

Zone	Zone short name		Total	
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7	7	Takal	
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Scenario 3 average annual costs (Direct+15%OH+15%contingency)

Zone	Zone short name	Total	
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ZONE 4	Tekapo catchment, Lake Tekapo	\$	876,000
	TOTAL average annual direct + indirect cost	\$	3,782,000



From: Karina Morrow

To: <u>Hughey, Kenneth; Jo Macpherson; Susan Newell; Richard Maloney; Nicki Atkinson; Michael Hayward; Dean</u>

Nelson; Colin O"Donnell; Herb Familton

Cc: Ken Hughey

Subject: RE: Quick update on today"s f2f with generators

Date: Thursday, 9 June 2022 3:54:45 pm

Hi Ken

9 (2) (i)

Karina

From: Hughey, Kenneth < (2) (a)

Sent: Thursday, 9 June 2022 3:24 pm

To: Jo Macpherson <jmacpherson@doc.govt.nz>; Susan Newell <snewell@doc.govt.nz>; Richard Maloney <rmaloney@doc.govt.nz>; Nicki Atkinson <natkinson@doc.govt.nz> Michael Hayward <mhayward@doc.govt.nz>; Dean Nelson <dnelson@doc.govt.nz>; Colin O'Donnell <CODONNELL@doc.govt.nz>; Herb Familton <hfamilton@doc.govt.nz> Karina Morrow <kmorrow@doc.govt.nz>

Cc: Ken Hughey <khughey@doc.govt.nz>

Subject: Quick update on today's f2f with generators

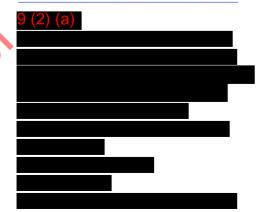
Dear all

A well organised, constructive, but tough session. We do agree on a lot, well pretty much everything, except the \$\$. They did come back with a counter offer which I have shared with Richard because we need to do some work around it, and with Herb because I saw him sitting by himself in the tea area and I needed to download! I was pretty clear that the counter, in my view, was still not enough! 9(2)(j)

Basically, and Richard and khave chatted, I have asked him to have a quick look at what 2, 2.5 and 3m would buy us in terms of biodiversity outcomes, in two packages: 1. Focussed on the lower Waitaki and impact d Basin rivers – Ohau, Pukaki and Tekapo, largely in the woody weed and predator control spaces; 2. The 1st package and targeted work on the Ahuriri and Tasman. We need to think about this terms of some potential front loading but also in terms of phasing

In relation to the above we are meeting, over Teams, again next Friday morning, for an hour. Thanks for your continued support!

Ken



(the two in fact are very complementary).

From:

Richard Maloney; Ken Hughey To:

Subject: RE: Copy of Approximate current costs Waitaki catchment June 2022_ver2.xlsx

Date: Tuesday, 7 June 2022 1:53:38 pm

Copy of Copy of Approximate current costs Waitaki catchment.xlsx Attachments:

Hi Richard,

Couple of minor changes – braided river surveys, Tasman, Dobson, Haka are PRR as is outcome monitoring of BFT on Tasman.

Cheers, Dean

From: Richard Maloney <rmaloney@doc.govt.nz>

Sent: Friday, 3 June 2022 3:39 pm

To: Ken Hughey <khughey@doc.govt.nz> Cc: Dean Nelson <dnelson@doc.govt.nz>

Subject: Copy of Approximate current costs Waitaki catchment June 2022_ver2.xlsx

Latest version



Work area	Work type	Total
Freshwater work	Reseach and management	10
Freshwater work Total		10
Lower Waitaki	Weeds	91
Lower Waitaki Total		91
Terrestrial Science work	Reseach and management	7
Terrestrial Science work To	tal	7
Upper river catchment	Biosecurity funding	2
	Zone committee funding	10
	Outcome monitoring	
	Pest bird control	5
	Pest control - possum	11
	Predator Control avian	3
	Predator Control mammalian	24
	Rabbit fencing	8
	Rabbits	73
	Research and management	21
	Species management - Braided riverbed bird surveys	
	Species management - invertebrates	
	Species management - kaki	24
	Species management - lizards	
	Species management - threatened and ephemeral plants	1
	Species managemen - threatened fish	2
	Staff costs not covered elsewhere	21
	Tenure review	7,12
	Weeds	1,10
Upper river catchment Total		10,36
Grand Total	(7)	11,45
Upper river catchment Total Grand Total		

	_	_			
Work area	Work type	Work	Per annum	Significant recent one-offs	Notes
Upper river catchment	Weeds	river weed work J4N funded via	\$ 830,914		Zones 4 and 3A
Upper river catchment	Weeds	DOC	\$ 29,781		
Upper river catchment	Weeds		\$ 48,940		Tekapo and Dobson
Upper river catchment	Weeds	separate to above	\$ 15,000		Dobson
opper fiver cateriment	vvccus	funded rabbit control via in Tekapo, Ohau,	13,000		2003011
Linnar river eatahment	Rabbits	Pukaki, Tasman, Ahuriri, Godley riverbeds	\$ 610,584		
Upper river catchment			. ,		
Upper river catchment	Rabbits	DOC in Tasman riverbed	\$ 127,868		
Upper river catchment	Staff costs not covered elsewhere	project	\$ 215,730		
Upper river catchment	Species management - kaki	Kaki management	\$ 242,466		
Upper river catchment	Species management - lizards	Lizard monitoring -	\$ 6,716		Protected by predator control
opper river eatermient	Species management - threatened	Macrophyte control, trout barrier maintenance and	0,710		Includes some staff time for trout removal in Fork
Upper river catchment	fish	monitoring	\$ 23,200		Stream
Upper river catchment	Species management - invertebrates	Grasshopper surveys and monitoring	\$ 8,065		
	Species management - threatened	Plant surveys, seeding and germination trials, monitoring			
Upper river catchment	and ephemeral plants	and survey	\$ 13,020		
opper fiver cateriment	and epiterieral plants	and survey	7 13,020		Quite a bit missing out of here - probably it is staff time
Upper river catchment	Predator Control mammalian	Various species via	\$ 30,119		shown in row 8
Upper river catchment	Predator Control mammalian	Various species via DOC	\$ 151,413	\$92,000	Huxley Hopkins for traps
Upper river catchment	Predator Control mammalian	Various species separate to above	\$ 60,000		Dobson, trap costs not available
Upper river catchment	Pest control - possum	Possum control Huxley Hopkins	\$ 112,805		
Upper river catchment	Predator Control avian	black-backed gull control	\$ 30,594		
	Pest bird control		\$ 57,957		
Upper river catchment		Canada goose control			
Upper river catchment	Research and management	Tier monitoring site Tasman Rv	\$ 15,000		
Upper river catchment	Research and management	DOC/ Uni Predator fence insects	\$ 10,000	\$130,000	one-off was recent fence build
					includes \$10k DOC support, University in-kind and
Upper river catchment	Research and management	DOC/Uni/ River dynamics research Cass	\$ 110,000	I	scholarships
Upper river catchment	Research and management	DOC grasshopper and weta field and advice	\$ 20,000		TSU time
opper river caterillient	nescuren unu management	555 Prassilopper and weta liela and davice	20,000	 	
	1			I	Calculated as 40% of total project costs (4 of 6 sites for
	1		l .	I	invertebrates, 2 of 6 sites for lizards and 2 of 6 sites for
Upper river catchment	Research and management	DOC hedgehog impacts on invertebrate/lizard research	\$ 60,000		hedgehog trapping methods)
Upper river catchment	Weeds	Weeds and river works operation budget?	\$ 178,000		Lower Waitaki and Tekapo
		DOC/farmer River fence maintainence - Tekapo,			·
Upper river catchment	Rabbit fencing	Pukaki, Ohau	\$ 84,825		
		-			2 11 1 11
Upper river catchment	Zone committee funding	Fencing and other river/wetland projects	\$ 104,000		Possible overlap with weed work?
Upper river catchment	Biosecurity funding	Weed control	\$ 20,000		
		DOC tenure review wetland and riverbed puchases			Crown contribution estimate for ten re revi w wet nds
Upper river catchment	Tenure review	(eg Cass, Ahuriri riverbeds, Mt Gerald wetland)	\$ 7,128,000		and river areas
Lower Waitaki	Weeds	<u> </u>	\$ 375,000		Approx split from Jeff Page mail 11 April
		Meridian contribution to work			
Lower Waitaki	Weeds	weed control + mechanical works	\$ 375,000		Approx split from eff Page mail 11 Ap
Lower Waitaki	Weeds	Lower waitaki Geraldine ops team	\$ 70,000		
Lower Waitaki	Weeds	Lower Waitaki ops budget for nga awa work going forward	\$ 90,000		
zowe. waitam	· · · · · · · · · · · · · · · · · · ·	zower water ops sauget for figuration going formate	30,000		
- 1					
Freshwater work	Reseach and management	Nga Awa Waitaki river restoration report with costings		\$ 50,000.00	
		Nga Awa Waitaki R land encroachment study (from			couple of ars ag but still a very relevant piece of
Freshwater work	Reseach and management	2019/20)		\$ 60,000.0	work/cost
		Nga Awa staff time: 0.5FTE Snr Ranger, 0.3FTE C Band and			
Freshwater work	Reseach and management	0.2FTE Tech Advisor	\$ 100,000		
Tresmater work	neseden and management		Ţ 100,000		
					work that will support nga awa restoration at Waitaki
		Nga Awa work on sediment movment in Rangitat -			and other rivers. Total cost was \$100k. Proportioned as 1
Freshwater work	Reseach and management	applicable to all braided rivers pro rated (1/4th)		\$ 000.00	out of 4 doc regions work is applicable too
					work that will support nga awa restoration at Waitaki
		Migatory Fish programme - guidance on Inanga monitoring			and other rivers. Total cost was \$20k. Proportioned as 1
				4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
Freshwater work	Reseach and management	pro rata (1/9th)		\$ 2,000.00	out of 9 doc regions work is applicable too
	1				work that will support nga awa restoration at Waitaki and
	1	Migatory Fish programme - kanakana larval fishing	4		other rivers. Total cost was \$15k. Proportioned as 1 out of
Freshwater work	Reseach and management	methods pro rata (1/9th)	, .	\$ 2,000.00	9 doc regions work is applicable too
			**		
	1			—	work that will support nga awa restoration at Waitaki and
		Migraton, fich programme, glass cel			
	L	Migratory fish programme - glass eel reseach work pro		. ▼	other rivers. Total cost \$30k. Proportioned as 1 out of 9
Freshwater work	Reseach and management	rata (1/9th)		\$ 3,000.00	doc regions work is applicable too
	1			I	
	1			I	work that will support nga awa restoration at Waitaki and
	1	Migatory fish programme - NIWA report on eel trap and		I	other rivers. Total cost \$30k Proportioned as 1 out of 7
Freshwater work	Reseach and management	transfer pro rata (1/7th)		\$ 3,000,00	doc regions work is applicable too
		and the same of th		5,300.00	and a special control of the special control
	1			I	wark that will avanget ago over each action at Marie 11
					work that will support nga awa restoration at Waitaki and
	1	CRESP programme - reduced flow scenarios with out an		I	other rivers. Total cost \$60k Proportioned as 1 out of 2
Freshwater work	Reseach and management	non migratory glaxias reseach pro rata (1/2)		\$ 30,000.00	doc regions work is applicable too
			7		
	1			I	work that will support nga awa restoration at Waitaki and
	1	Freshwater Biosecurity programme sup or chec clean		I	other rivers. Total cost \$50k Proportioned as 1 out of 9
Frachust	Bassach and			I	
Freshwater work	Reseach and management	dry - pro rata (1/9th)	\$ 6,000		doc regions work is applicable too
Terrestrial Science work	Reseach and management	Technical Support for Waitak River (in, etc)	\$ 15,000		
		Woody vegetation restoration on Easter outh Island			*These projects are on limestone ecosystems within the
Terrestrial Science work	Reseach and management	limestone*	\$ 30,000	I	Waitaki Valley
. C CSC . GI SCICILCE WOLK		Control and influenge of invisive siding grasses on	, JU,000		
Townstric! C-!	Bassach and			I	
Terrestrial Science work	Reseach and management	native pla t*	\$ 7,000	-	
	1	Rare calcicol s plan propaga ion and translocation; and		I	
	1	Pollinators of ra calcico ous plants: diversity and		I	
Terrestrial Science work	Reseach and management	effici ncy*	\$ 10,000	I	
		Thre tene lan Monitoring in the Waitaki*	\$ 15,000		
Terrestrial Science work	Researn and management				
Terrestrial Science work	Reseach and management	Thre tene law Wonttoring in the Waltaki		ć	
	overheads, indirects and conting cy	Three tene law Wonitoring in the Waltaki	\$ 11,437,997	\$ 397,000	

Weed management Outcome monitoring Predator Control mammalian	1	+	nnum	Significant recent one-offs	Notes	
Outcome monitoring	PRR	\$	158,614	\$ 9		5 4, 3A, 3B, 2. One of is lower Ohau weed con 720. Needed ever 2-3 years
	Monitoring BFT breeding success as part of Tasman	+		, , 	-,, -015/	2 7 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5
	predator control	\$	9,912			
Predator Control mammalian						an, Te n Island. One off is trap replacement Te
	Various species	\$	152,663	\$ 2	0,000 Island	
Predator control avian	PRR black-backed gull control	\$	24,447			
	Braided riverbed bird surveys - Tasman, Dobson,					an every year. Other two part of a three year
Research and management	Hakataramea	\$	5,516			switch to another two rivers
Research and management Research and management	Tern Island black-fronted tern monitoring Lizard monitoring	\$	16,048 6,304		Prote	cted by predator control
research and management	Lizara monitornig	٦	0,304		*	
Research and management	DOC/Uni/PRR black fronted tern movements research	\$	100,000			
Research and management	DOC/PRR River terr invertebrate sampling	\$	50,000			
<u>_</u>	DOC/PRR/ Tu Te Rakiwhanoa Mackenzie rivers	<u> </u>	,	XU		
Research and management	invertebrate refence collection work	\$	30,000			
PRR approx total		\$	553,504	\$ 115	,337	

Glentanner east of road 461 Mt Cook station Jollie fan + TL river flats of tasman 400 Mt Gerald wetland 749 Godley Peaks TL above Sutherlands hut 100 Lower Cass Rv bed 92. Cant get the bit that is due to come out soon. Ben Avon pond area down to east branch (river flats/swamps outside of BenAvon reserve) 123 Birchwood swamp etc on Birchwood station 713 Ahuriri River at Longslip 100 Probably something on Huxley Gorge station at temple stream area? 576 Also tarn Brae 164 9-Scientific Reserve The Wolds 11-Pukaki Kettleholes 15-Wairepo Kettleholes 18-Lower Ahuriri Riverbed/CA 19-Tara Hill Ponds	461 400 749 100 500 est 123 713 100 576 164 150 31 400 200 85 4752
	ha Approx cost per ha Total contribution \$7,1
Released under Oil	