

Melissa Bray

From: [REDACTED]
Sent: Saturday, 17 July 2021 11:50 am
To: [REDACTED]
Subject: RE: Te Kuha polling frequency

We have turned up the polling frequency to 15 minutes for one of the loggers at Te Kuha, this should take effect after 12:00.

We're not sure if this will automatically flow through to your HydroTel server at that frequency but I can get you a logon to the Neon telemetry system for that site so you can see it via that system.

If you have time it would be good to know a staff gauge reading or two to check our data is accurate but don't worry if you're busy as we can sort this out retrospectively.

R

From: [REDACTED] <[REDACTED]@wrc.govt.nz>
Sent: Saturday, 17 July 2021 11:42 AM
To: [REDACTED] <[REDACTED]@niwa.co.nz>
Subject: RE: Te Kuha polling frequency

Thank you so much [REDACTED] that's great news.

We've also organised one of our technicians to helicopter up to the Buller at Te Kuha site, and he will provide us with half hourly staff gauge readings via radio (or more regularly as required).

More than happy to pass these on to you if you would like?

[REDACTED]
+64 [REDACTED] Mon, Tues, Thurs, Fri | [West Coast Regional Council](#)

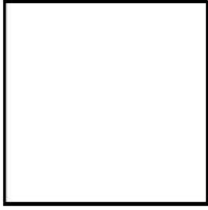
From: [REDACTED] <[REDACTED]@niwa.co.nz>
Sent: Saturday, July 17, 2021 11:37 AM
To: [REDACTED] <[REDACTED]@wrc.govt.nz>
Subject: Te Kuha polling frequency

This email is from an external sender. Please be careful with any links or attachments.

Hi [REDACTED]

I managed to get through to someone and they are looking into this now. We can only push an update to the logger scheme remotely at the next polling time, so will try and get this in place for 12:00 and switch to a more frequent update. A couple of technical issues to work through but I'll let you know how we get on.

Cheers,
[REDACTED]



9(2)(a) 9(2)(a)

Hydrodynamics Scientist

+64-3-9(2)(a)

+64-22-9(2)(a)

National Institute of Water & Atmospheric Research Ltd (NIWA)

10 Kyle Street Riccarton Christchurch New Zealand

Connect with NIWA: niwa.co.nz [Facebook](#) [LinkedIn](#) [Twitter](#) [Instagram](#)

To ensure compliance with legal requirements and to maintain cyber security standards, NIWA's IT systems are subject to ongoing monitoring, activity logging and auditing. This monitoring and auditing service may be provided by third parties. Such third parties can access information transmitted to, processed by and stored on NIWA's IT systems

Melissa Bray

From: [redacted] [redacted] <[redacted]@wrc.govt.nz>
Sent: Saturday, 17 July 2021 10:32 am
To: [redacted] [redacted]
Subject: Neon - HydroTel update frequency
Importance: High

Hi [redacted]

Buller Rv at Te Kuha is currently at a record high.

The WRC Buller Rv at Te Kuha instrument is malfunctioning. So, we are reliant on the NIWA instrument, which we only get updates on every hour.

Are we able to increase the frequency which NEON updates our HydroTel to every 15 minutes (or anything shorter than an hour)?

Thanks,

R

Apologies, I have not liaised in regard to our feeds reaching NIWA. I have been focused on this current event. But I have a meeting booked with IT on Monday to attempt to get feeds/data to you sorted.



[redacted] [redacted]
Hydrology Data Scientist
Mon, Tues, Thurs, Fri.
Mob. +64 [redacted]
[redacted] [redacted] [wrc.govt.nz](mailto:[redacted]@wrc.govt.nz)

PO Box 66, Greymouth 7840
388 Main South Road
www.wrc.govt.nz

Melissa Bray

From: [REDACTED] 9(2)(a) <[REDACTED]@wrc.govt.nz>
Sent: Friday, 16 July 2021 7:20 pm
To: [REDACTED] 9(2)(a) [REDACTED] 9(2)(a) [REDACTED] 9(2)(a)
Subject: FW: Buller River
Attachments: Buller Gorge.PNG; [REDACTED] et al 2021 - A field guide for selecting alpha - Envirolink Advice Report 2021196CH.pdf

Hi [REDACTED] 9(2)(a)

Thanks for reaching out.

We've arranged for drones in the area.

I'll leave you with [REDACTED] 9(2)(a) who will try and put you in contact with our pilots/coordinator of pilots.

Can you please send through advice to them about exactly what a useful video would contain/look like.

Gaugings of this would be an achievement to say the least – would love to see any data we could get out of it.

Thanks again for your interest. Might see you soon!

[REDACTED] 9(2)(a) [REDACTED] 9(2)(a)
+64 [REDACTED] 9(2)(a) Hydrology Team Leader | West Coast Regional Council

From: [REDACTED] 9(2)(a) [REDACTED] 9(2)(a) <[REDACTED] 9(2)(a) [REDACTED] 9(2)(a)@niwa.co.nz>
Sent: Thursday, 15 July 2021 18:43
To: [REDACTED] 9(2)(a) [REDACTED] 9(2)(a) <[REDACTED] 9(2)(a)@wrc.govt.nz>
Subject: Buller River

This email is from an external sender. Please be careful with any links or attachments.

Hi [REDACTED] 9(2)(a)

Hope everything's going well and the floods this week don't end up being too big!

It's not important if you are flat out, but if you happen to be up in chopper, or somewhere with a good view of any of the flooded rivers, if you could get some video from a phone, drone, dslr camera or whatever, that would be awesome!

We can come back later to survey a cross section and collect ground control points. I [REDACTED] 9(2)(a) GPS locations of natural objects.

Good luck!

Cheers,
[REDACTED] 9(2)(a)

P.S. The Envirolink advice document for selecting alpha is out too. [Attached]

9(2)(a) 9(2)(a)

Ecohydraulics Scientist



+64-3-9(2)(a)

+64-27-9(2)(a)

National Institute of Water & Atmospheric Research Ltd (NIWA)
10 Kyle Street Riccarton Christchurch New Zealand

Connect with NIWA: niwa.co.nz [Facebook](#) [LinkedIn](#) [Twitter](#) [Instagram](#)

To ensure compliance with legal requirements and to maintain cyber security standards, NIWA's IT systems are subject to ongoing monitoring, activity logging and auditing. This monitoring and auditing service may be provided by third parties. Such third parties can access information transmitted to, processed by and stored on NIWA's IT systems

Melissa Bray

From: 9(2)(a) 9(2)(a) <9(2)(a)@wrcrc.govt.nz>
Sent: Friday, 16 July 2021 6:03 pm
To: 9(2)(a) 9(2)(a)
Subject: RE: Stopbanks are built to a 1/50 year flood level.

Stopbanks at 7.7m.
According to our documentation we consider/advise declare an emergency at 6.7m.

9(2)(a) 9(2)(a)
+64 9(2)(a) | Mon, Tues, Thurs, Fri | West Coast Regional Council

From: 9(2)(a) 9(2)(a) <9(2)(a)@niwa.co.nz>
Sent: Friday, July 16, 2021 6:02 PM
To: 9(2)(a) 9(2)(a) <9(2)(a)@wrcrc.govt.nz>
Subject: RE: Stopbanks are built to a 1/50 year flood level.

This email is from an external sender. Please be careful with any links or attachments.

Thanks

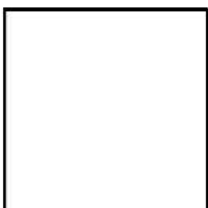
From: 9(2)(a) 9(2)(a) <9(2)(a)@wrcrc.govt.nz>
Sent: Friday, 16 July 2021 6:01 PM
To: 9(2)(a) 9(2)(a) <9(2)(a)@niwa.co.nz>
Subject: Stopbanks are built to a 1/50 year flood level.

Stopbanks are built to a 1/50-year flood level.



9(2)(a) 9(2)(a)
Hydrology Data Scientist
Mon, Tues, Thurs, Fri.
Mob. +64 9(2)(a)
9(2)(a) [wrcrc.govt.nz](mailto:9(2)(a)@wrcrc.govt.nz)

PO Box 66, Greymouth 7840
388 Main South Road
www.wcrc.govt.nz



9(2)(a) 9(2)(a)
Hydrodynamics Scientist

+64-3-9(2)(a)
+64-22-9(2)(a)
National Institute of Water & Atmospheric Research Ltd (NIWA)

10 Kyle Street Riccarton Christchurch New Zealand

Connect with NIWA: niwa.co.nz [Facebook](#) [LinkedIn](#) [Twitter](#) [Instagram](#)

To ensure compliance with legal requirements and to maintain cyber security standards, NIWA's IT systems are subject to ongoing monitoring, activity logging and auditing. This monitoring and auditing service may be provided by third parties. Such third parties can access information transmitted to, processed by and stored on NIWA's IT systems

Melissa Bray

From: [redacted]
Sent: Friday, 16 July 2021 1:03 pm
To: [redacted]@wrc.govt.nz; [redacted]@wrc.govt.nz; [redacted]@wrc.govt.nz
Cc: [redacted]@wrc.govt.nz; [redacted]@wrc.govt.nz; [redacted]@wrc.govt.nz
Subject: Contact details, flood timing and distribution of waves along coast

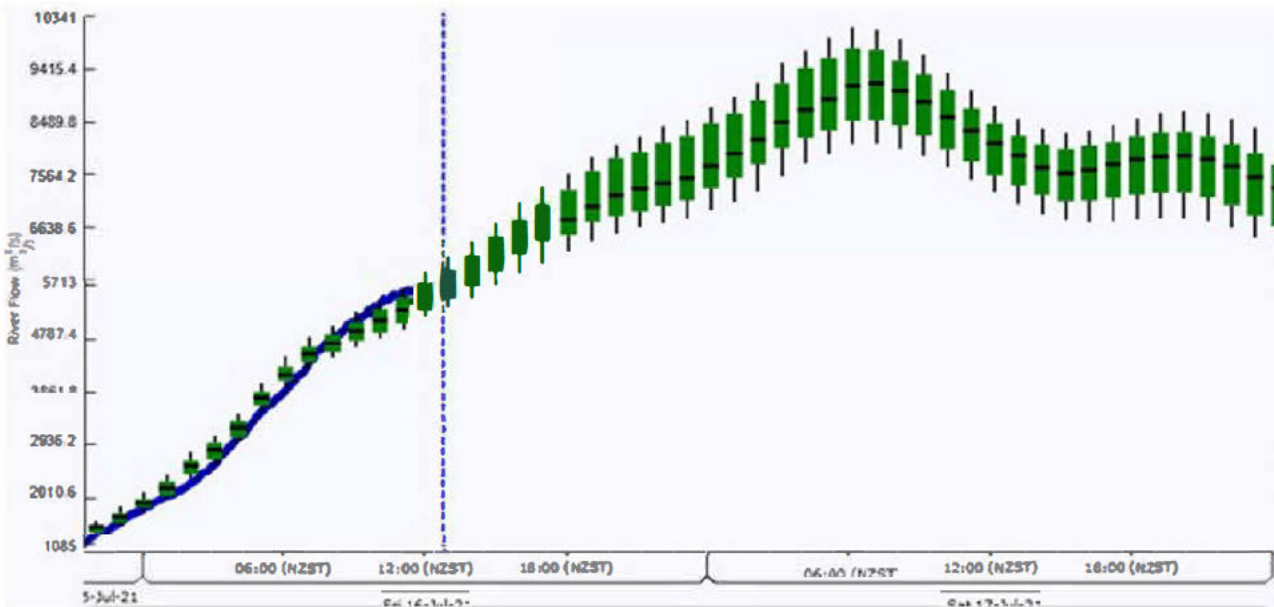
Hi [redacted]

A few follow ups from the meeting:

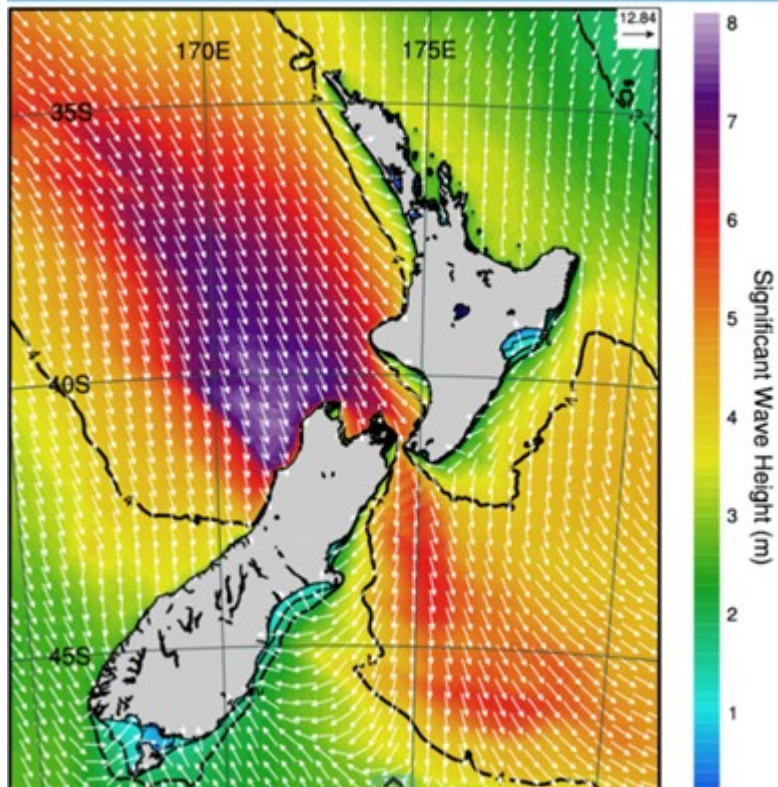
My contact details are

[redacted]
MSTeams: [redacted]@niwa.co.nz
[redacted]

Regarding the question re flood timing I've included an image from one model below which seems to be tracking most closely to observed flow so far. This plot shows forecast flow for Buller at Te Kuha. I should also mention that one of the models is predicting flows of up to 15,000 m³/s – I have low confidence in that particular model, but should probably mention this possibility.



Regarding [redacted] question about the expected area for wave and storm surge influence it looks to be pretty uniform waves along the coast between Karamea and Westport, with smaller waves south of Westport (see plot below). The approximately 300mm Storm surge due to the low pressure is affecting the whole west coast as far as Jacksons Bay.



Let me know if I or anyone else at NIWA can be of further assistance.

Cheers,
9(2)(a)

Melissa Bray

From: 9(2)(a) 9(2)(a)
Sent: Friday, 16 July 2021 12:25 pm
To: 9(2)(a) 9(2)(a) info@tppp.nz
Cc: 9(2)(a) 9(2)(a) 9(2)(a) 9(2)(a)
Subject: NIWA proposal for assessment of high coastal hazard areas for the West Coast
Attachments: WCRC_Coastal_Hazard_proposal_Final.pdf

Kia ora 9(2)(a)

Please find attached our proposal for assessment of high coastal hazard areas for the West Coast. I believe the proposal is in line with your requirement and hope to hear from you soon.

I hope the extreme rainfall and large swell of the weekend are not as bad as forecasted and that you and people in Westport are safe.

Kia kaha,
Best regards

Melissa Bray

From: 9(2)(a) 9(2)(a)
Sent: Friday, 16 July 2021 9:47 am
To: 9(2)(a) 9(2)(a)
Cc: 9(2)(a) 9(2)(a) 9(2)(a) 9(2)(a) 9(2)(a) 9(2)(a) 9(2)(a) 9(2)(a) 9(2)(a)
9(2)(a) 9(2)(a) 9(2)(a) 9(2)(a)
Subject: Forecast Sea conditions

Hi 9(2)(a)

FYI I've just been looking at forecast tide levels, surge and wave conditions with 9(2)(a) (NIWA wave expert) and comparing it to Fehi...

The event forecast has a slightly lower significant wave height and peak period than ex-TC Fehi but the difference is small. Unlike Fehi the largest waves will coincide with the high spring tide (3-4 am Saturday morning). The forecast coastal conditions are definitely reminiscent of the condition during ex-TC Fehi, coming through with a similar wave direction to that event.

Thought it might be worth highlighting the coastal forecast in case it had been missed with the focus on the rain/river conditions. The waves and tides are timed to coincide with the high flows in the Buller 😞

Cheers,
9(2)(a)

Melissa Bray

From: 9(2)(a) 9(2)(a)
Sent: Friday, 16 July 2021 8:32 am
To: 9(2)(a) 9(2)(a)
Subject: RE: Buller Flood - Forecast flows

You might have to email me a "meeting" as teams doesn't seem to allow me to call you directly?

From: 9(2)(a) 9(2)(a)
Sent: Friday, 16 July 2021 8:10 AM
To: 9(2)(a) 9(2)(a) <9(2)(a)@wrc.govt.nz>
Subject: RE: Buller Flood - Forecast flows

8:30 works for me

From: 9(2)(a) 9(2)(a) <9(2)(a)@wrc.govt.nz>
Sent: Friday, 16 July 2021 8:09 AM
To: 9(2)(a) 9(2)(a) <9(2)(a)@niwa.co.nz>; 9(2)(a) 9(2)(a) <9(2)(a)9(2)(a)@niwa.co.nz>; 9(2)(a) 9(2)(a) <9(2)(a)9(2)(a)@niwa.co.nz>
Cc: 9(2)(a) 9(2)(a) <9(2)(a)@wrc.govt.nz>; 9(2)(a) 9(2)(a) <9(2)(a)@wrc.govt.nz>; 9(2)(a) 9(2)(a) <9(2)(a)@wrc.govt.nz>; 9(2)(a) 9(2)(a) <9(2)(a)9(2)(a)@wrc.govt.nz>
Subject: RE: Buller Flood - Forecast flows

Morning 9(2)(a)

Quite short notice but would 0830 work for you? There'll be a collection of staff there together which won't happen often in this event.

If not when would work for you this morning?

I'll be in a meeting at 9am.

Correct on the extra staff for logins, those cc'd.

Thanks for the info.

Chat soon.

9(2)(a) 9(2)(a)
+64 9(2)(a) | Hydrology Team Leader | West Coast Regional Council

From: 9(2)(a) 9(2)(a) <9(2)(a)@niwa.co.nz>
Sent: Thursday, 15 July 2021 22:10
To: 9(2)(a) 9(2)(a) <9(2)(a)@wrc.govt.nz>; 9(2)(a) 9(2)(a) <9(2)(a)9(2)(a)@niwa.co.nz>; 9(2)(a) 9(2)(a) <9(2)(a)9(2)(a)@niwa.co.nz>
Cc: 9(2)(a) 9(2)(a) <9(2)(a)@wrc.govt.nz>; 9(2)(a) 9(2)(a) <9(2)(a)@wrc.govt.nz>; 9(2)(a) 9(2)(a) <9(2)(a)@wrc.govt.nz>
Subject: RE: Buller Flood - Forecast flows

This email is from an external sender. Please be careful with any links or attachments.

Hi [REDACTED]

A teams chat tomorrow morning would work well. See my answers to your questions below in red. Feel free to call if there's any issues.

Cheers,
[REDACTED]

From: [REDACTED] [REDACTED] <[REDACTED]@wrcr.govt.nz>
Sent: Thursday, 15 July 2021 9:04 PM
To: [REDACTED] [REDACTED] <[REDACTED]@niwa.co.nz>; [REDACTED] [REDACTED] <[REDACTED]@[REDACTED]>
[REDACTED] [REDACTED] <[REDACTED]@niwa.co.nz>; [REDACTED] [REDACTED] <[REDACTED]@niwa.co.nz>
Cc: [REDACTED] [REDACTED] <[REDACTED]@wrcr.govt.nz>; [REDACTED] [REDACTED] <[REDACTED]@wrcr.govt.nz>; [REDACTED] [REDACTED] <[REDACTED]@wrcr.govt.nz>
Subject: RE: Buller Flood - Forecast flows

Hi [REDACTED]

Thanks very much for checking in.

We will be using ecoconnect for this event – it's something in place of our nothing for now. Admittedly it seldom gets use of late so we're often a bit rusty on it. Furthermore, it may have changed a bit since some people last logged on which will add an aspect of excitement for them!

I have just logged on and checked out the outcomes as you read them – some pretty serious totals, especially for the Buller as you say.

In taking up your offer of support for ecoconnect, I have a couple of questions...

- How many people can we have logged in on the one account? Can I pass out my login details for the team or can another couple of accounts be created for our use? I guess these would come about as part of the early warning system project anyway. I'm not sure about multiple log-ons to the same account but I'd say give it a try and see what happens! I'll look into getting some extra accounts set up tomorrow morning. I presume [REDACTED] [REDACTED] and [REDACTED] are the people who will want accounts?
- Would you possibly be able to give us some really brief direction on the best ecoconnect tools to use for this event. There are a couple of modelled hydrographs for the Buller at Te Kuha for example, if you could clear up what their differences are that would be quite helpful. We can discuss this tomorrow in more detail but my overall advice would be to look at them all to get a feel for the spread/uncertainty.
 - NZCSM is our high-res (1km grid) weather model which runs 48hours into the future, vs NZLAM which is a lower resolution model extending further into the future.
 - I think (will confirm tomorrow once I'm in the office) BAP1 refers to a data assimilation scheme which is designed to use recent gauge data to improve model performance, however we have found that this can introduce other biases, so isn't always better, especially in the early stages of an event.
 - As well as the flow forecast you will probably want to see the tide/storm-surge/wave forecasts which are contained in the "Seagram" plots.

This might be best achieved by a phone call or teams chat tomorrow morning? Or a quick reference document if you'd prefer? Keen to hear your thoughts on the best way to achieve this.

Rest assured, we understand the limitations of these models so won't be hanging hats on them as you don't either.

Thanks again for reaching out. Times like these you really know who your friends are!

9(2)(a) 9(2)(a)
+64 9(2)(a) | Hydrology Team Leader | West Coast Regional Council

From: 9(2)(a) 9(2)(a) <9(2)(a)@niwa.co.nz>
Sent: Thursday, 15 July 2021 17:10
To: 9(2)(a) 9(2)(a) <9(2)(a)@wrc.govt.nz>; 9(2)(a) 9(2)(a) <9(2)(a)9(2)(a)@niwa.co.nz>; 9(2)(a) 9(2)(a) <9(2)(a)9(2)(a)@niwa.co.nz>
Subject: Buller Flood - Forecast flows

This email is from an external sender. Please be careful with any links or attachments.

Hi 9(2)(a)

Just wanted to check that you had access to the currently operating flow models in Ecoconnect for the Buller (and Grey and Karamea). They are currently showing ~10,000m³/s for the Buller, 5,500 for the Karamea and 6,000 for the Grey – peaking on Saturday morning. I'm not sure how much to trust these flows as the calibration is not amazing at the moment, but this is certainly big, especially on the Buller. Feel free to give me a call on 9(2)(a) if you want to discuss or if you are having trouble accessing EcoConnect.

Cheers,
9(2)(a)

9(2)(a) 9(2)(a)
Hydrodynamics Scientist



+64-3-9(2)(a)
+64-22-9(2)(a)
National Institute of Water & Atmospheric Research Ltd (NIWA)
10 Kyle Street Riccarton Christchurch New Zealand
Connect with NIWA: niwa.co.nz [Facebook](#) [LinkedIn](#) [Twitter](#) [Instagram](#)

standards, NIWA's IT systems are subject to ongoing monitoring, activity logging and auditing. This monitoring and auditing service may be provided by third parties. Such third parties can access information transmitted to, processed by and stored on NIWA's IT systems

Melissa Bray

From: 9(2)(a) 9(2)(a)
Sent: Friday, 16 July 2021 7:48 am
To: 9(2)(a) 9(2)(a)
Subject: Re: Consistent messaging

Awesome,
Anything we can get out hands on will be a big help.

Stay safe out there.

9(2)(a)

Sent from my iPhone

On 16/07/2021, at 7:42 AM, 9(2)(a) 9(2)(a) <9(2)(a)9(2)(a)@wrc.govt.nz> wrote:

Hi 9(2)(a)

Yep we will be gathering footage throughout this event.

9(2)(a)

9(2)(a) 9(2)(a)
Emergency Management Officer - Buller District
Group Public Information Manager
Tel. 03 9(2)(a)
M: 021 9(2)(a)
9(2)(a) 9(2)(a)9(2)(a) @wrc.govt.nz
Website: www.westcoastemergency.govt.nz

<image001.jpg>

From: 9(2)(a) 9(2)(a) <9(2)(a)@niwa.co.nz>
Sent: Friday, 16 July 2021 7:39 AM
To: 9(2)(a) 9(2)(a) <9(2)(a)9(2)(a)@wrc.govt.nz>
Subject: Re: Consistent messaging

This email is from an external sender. Please be careful with any links or attachments.

Hi 9(2)(a)

Do you know of anyone who might be able to safely get us some footage of the large rain event coming through today and tomorrow?

Swollen rivers, flooding, heavy rain etc

The footage would be super helpful for the video.

Even cell phone footage would be useful.

Again only if you think they can safely do this.

Let me know.

Thanks

[REDACTED]

Sent from my iPhone

On 12/07/2021, at 10:58 AM, [REDACTED] 9(2)(a) <[REDACTED]9(2)(a)> wrc.govt.nz> wrote:

Hey [REDACTED]

Instead of creating a timeline, is the attached any use for you in terms of readiness, response and post flood comms?

We mainly use social media & radio broadcasting should we need members of the public to take action.

Thanks [REDACTED]

[REDACTED] 9(2)(a)

Emergency Management Officer - Buller District

Group Public Information Manager

Tel. 03 [REDACTED]

M: 021 [REDACTED]

[REDACTED] 9(2)(a) 9(2)(a) wrc.govt.nz<mailto:[REDACTED]9(2)(a)> wrc.govt.nz>

Website:

[www.westcoastemergency.govt.nz<https://aus01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.westcoastemergency.govt.nz%2F&data=04%7C01%7Cstuart.\[REDACTED\]40niwa.co.nz%7C468d3c199d7b421b755b08d944bf45d1%7C41caed736a0c468aba499ff6aafd1c77%7C0%7C1%7C637616410951588543%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IjEhaWwiLCJXVCI6IjMn0%3D%7C2000&sdata=J%2FjvrsjS%2FpjA%2BOWs2wIckRhli2gS6zUd10eSqz7bDRQ%3D&reserved=0>](https://aus01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.westcoastemergency.govt.nz%2F&data=04%7C01%7Cstuart.[REDACTED]40niwa.co.nz%7C468d3c199d7b421b755b08d944bf45d1%7C41caed736a0c468aba499ff6aafd1c77%7C0%7C1%7C637616410951588543%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IjEhaWwiLCJXVCI6IjMn0%3D%7C2000&sdata=J%2FjvrsjS%2FpjA%2BOWs2wIckRhli2gS6zUd10eSqz7bDRQ%3D&reserved=0)

[WCEM Logo]



<Working from the Same Page Consistent Messages.pdf>

9(2)(a) 9(2)(a)
Digital Producer

<~WRD0000.jpg>

+64-9-9(2)(a)
+64-9(2)(a)

National Institute of Water & Atmospheric Research Ltd (NIWA)
41 Market Place Viaduct Harbour Auckland New Zealand

Connect with NIWA: niwa.co.nz [Facebook](#) [LinkedIn](#) [Twitter](#) [Instagram](#)

To ensure compliance with legal requirements and to maintain cyber security standards, NIWA's IT systems are subject to ongoing monitoring, activity logging and auditing. This monitoring and auditing service may be provided by third parties. Such third parties can access information transmitted to, processed by and stored on NIWA's IT systems

Melissa Bray

From: 9(2)(a) 9(2)(a)
Sent: Friday, 16 July 2021 7:45 am
To: 9(2)(a) 9(2)(a)
Cc: 9(2)(a) 9(2)(a) 9(2)(a) 9(2)(a) 9(2)(a) 9(2)(a) 9(2)(a) 9(2)(a) 9(2)(a) 9(2)(a)
Subject: Re: Buller Flood - Forecast flows

Thanks 9(2)(a)

Just adding info for BAP1: BAP1 is NZCSM with precipitation bias-corrected to the observed product VCSN. (Virtual Climate Station Network)

All models will have flow data assimilation in the first couple of hours.

On 15/07/2021, at 10:10 PM, 9(2)(a) 9(2)(a) <9(2)(a)@niwa.co.nz> wrote:

Hi 9(2)(a)

A teams chat tomorrow morning would work well. See my answers to your questions below in red. Feel free to call if there's any issues.

Cheers,
9(2)(a)

From: 9(2)(a) 9(2)(a) <9(2)(a)@wrc.govt.nz>
Sent: Thursday, 15 July 2021 9:04 PM
To: 9(2)(a) 9(2)(a) <9(2)(a)@niwa.co.nz>; 9(2)(a) 9(2)(a) <9(2)(a)@niwa.co.nz>; 9(2)(a) 9(2)(a) <9(2)(a)@niwa.co.nz>
Cc: 9(2)(a) 9(2)(a) <9(2)(a)@wrc.govt.nz>; 9(2)(a) 9(2)(a) <9(2)(a)@wrc.govt.nz>; 9(2)(a) 9(2)(a) <9(2)(a)@wrc.govt.nz>
Subject: RE: Buller Flood - Forecast flows

Hi 9(2)(a)

Thanks very much for checking in.

We will be using ecoconnect for this event – it's a something in place of our nothing for now. Admittedly it seldom gets use of late so we're often a bit rusty on it. Furthermore, it may have changed a bit since some people last logged on which will add an aspect of excitement for them!

I have just logged on and checked out the outcomes as you read them – some pretty serious totals, especially for the Buller as you say.

In taking up your offer of support for ecoconnect, I have a couple of questions...

- How many people can we have logged in on the one account? Can I pass out my login details for the team or can another couple of accounts be created for our use? I guess these would come about as part of the early warning system project anyway. I'm not sure about multiple log-ons to the same account but I'd say give it a try and see what happens! I'll look into getting some extra accounts set up tomorrow morning. I presume 9(2)(a) 9(2)(a) and 9(2)(a) are the people who will want accounts?

- Would you possibly be able to give us some really brief direction on the best ecoconnect tools to use for this event. There are a couple of modelled hydrographs for the Buller at Te Kuha for example, if you could clear up what their differences are that would be quite helpful. We can discuss this tomorrow in more detail but my overall advice would be to look at them all to get a feel for the spread/uncertainty.
 - NZCSM is our high-res (1km grid) weather model which runs 48hours into the future, vs NZLAM which is a lower resolution model extending further into the future.
 - I think (will confirm tomorrow once I'm in the office) BAP1 refers to a data assimilation scheme which is designed to use recent gauge data to improve model performance, however we have found that this can introduce other biases, so isn't always better, especially in the early stages of an event.
 - As well as the flow forecast you will probably want to see the tide/storm-surge/wave forecasts which are contained in the "Seagram" plots.

This might be best achieved by a phone call or teams chat tomorrow morning? Or a quick reference document if you'd prefer? Keen to hear your thoughts on the best way to achieve this.

Rest assured, we understand the limitations of these models so won't be hanging hats on them as you don't either.

Thanks again for reaching out. Times like these you really know who your friends are!

9(2)(a) 9(2)(a)
+64 9(2)(a) Hydrology Team Leader | West Coast Regional Council

From: 9(2)(a) 9(2)(a) <9(2)(a)@niwa.co.nz>
Sent: Thursday, 15 July 2021 17:10
To: 9(2)(a) 9(2)(a) <9(2)(a)@wrc.govt.nz>; 9(2)(a) 9(2)(a) <9(2)(a)9(2)(a)@niwa.co.nz>; 9(2)(a) 9(2)(a) <9(2)(a)9(2)(a)@niwa.co.nz>
Subject: Buller Flood - Forecast flows

This email is from an external sender. Please be careful with any links or attachments.

Hi 9(2)(a)

Just wanted to check that you had access to the currently operating flow models in Ecoconnect for the Buller (and Grey and Karamea). They are currently showing ~10,000m3/s for the Buller, 5,500 for the Karamea and 6,000 for the Grey – peaking on Saturday morning. I'm not sure how much to trust these flows as the calibration is not amazing at the moment, but this is certainly big, especially on the Buller. Feel free to give me a call on 9(2)(a) if you want to discuss or if you are having trouble accessing EcoConnect.

Cheers,
9(2)(a)



9(2)(a) 9(2)(a)
Hydrodynamics Scientist

+64-3-9(2)(a)

+64-22-9(2)(a)

National Institute of Water & Atmospheric Research Ltd (NIWA)
10 Kyle Street Riccarton Christchurch New Zealand

Connect with NIWA: niwa.co.nz [Facebook](#) [LinkedIn](#) [Twitter](#) [Instagram](#)

To ensure compliance with legal requirements and to maintain cyber security standards, NIWA's IT systems are subject to ongoing monitoring, activity logging and auditing. This monitoring and auditing service may be provided by third parties. Such third parties can access information transmitted to, processed by and stored on NIWA's IT systems

Melissa Bray

From: [redacted] 9(2)(a) <[redacted]9(2)(a)> wrcr.govt.nz>
Sent: Friday, 16 July 2021 7:42 am
To: [redacted] 9(2)(a) 9(2)(a)
Subject: RE: Consistent messaging

Hi [redacted]

Yep we will be gathering footage throughout this event.

[redacted]

[redacted] 9(2)(a)
Emergency Management Officer - Buller District
Group Public Information Manager
Tel. 03 [redacted] 9(2)(a)
M: 021 [redacted] 9(2)(a)
[redacted] 9(2)(a) 9(2)(a) wrcr.govt.nz
Website: www.westcoastemergency.govt.nz



From: [redacted] 9(2)(a) 9(2)(a) <[redacted] 9(2)(a)> niwa.co.nz>
Sent: Friday, 16 July 2021 7:39 AM
To: [redacted] 9(2)(a) 9(2)(a) <[redacted] 9(2)(a) 9(2)(a)> wrcr.govt.nz>
Subject: Re: Consistent messaging

This email is from an external sender. Please be careful with any links or attachments.

Hi [redacted] 9(2)(a)

Do you know of anyone who might be able to safely get us some footage of the large rain event coming through today and tomorrow?

Swollen rivers, flooding, heavy rain etc

The footage would be super helpful for the video.

Even cell phone footage would be useful.

Again only if you think they can safely do this.

Let me know.

Thanks

[redacted] 9(2)(a)

Sent from my iPhone

Melissa Bray

From: 9(2)(a) 9(2)(a)
Sent: Thursday, 15 July 2021 6:43 pm
To: 9(2)(a) 9(2)(a)
Subject: Buller River
Attachments: Buller Gorge.PNG; 9(2)(a) et al 2021 - A field guide for selecting alpha - Envirolink Advice Report 2021196CH.pdf

Hi 9(2)(a)

Hope everything's going well and the floods this week don't end up being too big!

It's not important if you are flat out, but if you happen to be up in chopper, or somewhere with a good view of any of the flooded rivers, if you could get some video from a phone, drone, dslr camera or whatever, that would be awesome!

We can come back later to survey a cross section and collect ground control points. I have GPS locations of natural objects.

Good luck!

Cheers,
9(2)(a)

P.S. The Envirolink advice document for selecting alpha is out too. [Attached]

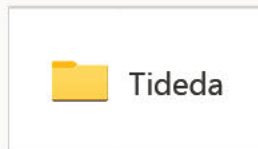
Melissa Bray


From: 9(2)(a) 9(2)(a)
Sent: Wednesday, 14 July 2021 8:32 am
To: 9(2)(a) wrcr.govt.nz
Subject: 9(2)(a) 9(2)(a) shared the folder "Tideda" with you.



9(2)(a) 9(2)(a) shared a folder with you

Hi 9(2)(a)
Here's the one drive link



 This link only works for the direct recipients of this message.

Open



[Privacy Statement](#)



Melissa Bray

From: [REDACTED] [REDACTED] <[REDACTED]>@wrcrc.govt.nz
Sent: Tuesday, 13 July 2021 4:40 pm
To: [REDACTED] [REDACTED]
Subject: RE: data transfers

Hi [REDACTED]

Yep, I have both. If you're able to give me access to a folder with the latest version or share a link, I'll be able to download it.

[REDACTED]

[REDACTED] [REDACTED]
+64 [REDACTED] [REDACTED] | Mon, Tues, Thurs, Fri | West Coast Regional Council

From: [REDACTED] [REDACTED] <[REDACTED]>@niwa.co.nz
Sent: Tuesday, July 13, 2021 4:26 PM
To: [REDACTED] [REDACTED] <[REDACTED]>@wrcrc.govt.nz
Subject: RE: data transfers

This email is from an external sender. Please be careful with any links or attachments.

Hi [REDACTED]

Do you have OneDrive or SharePoint? That's our IT preferred methods of sharing files

k

From: [REDACTED] [REDACTED] <[REDACTED]>@wrcrc.govt.nz
Sent: Tuesday, 13 July 2021 4:21 PM
To: [REDACTED] [REDACTED] <[REDACTED]>@niwa.co.nz
Subject: RE: data transfers

Hi [REDACTED]

Thanks for trying! It would be great if we could please get the latest version from you as we don't have it.

IT have suggested if you could please upload the file to Dropbox and then send me the link?

Also, another way round idea, could I send [REDACTED] the update, as she usually takes xml from me?

[REDACTED]

[REDACTED] [REDACTED]
+64 [REDACTED] [REDACTED] | Mon, Tues, Thurs, Fri | West Coast Regional Council

From: [REDACTED] [REDACTED] <[REDACTED]>@niwa.co.nz
Sent: Tuesday, July 13, 2021 4:06 PM

To: 9(2)(a) 9(2)(a) <9(2)(a)@wrc.govt.nz>
Subject: RE: data transfers

This email is from an external sender. Please be careful with any links or attachments.

Hi 9(2)(a)

No, I haven't used xml files before.

I have been trying to send you the latest version of Tideda if you need it, but the email keeps getting rejected. Do you have a ftp or something I can pop it into?

Cheers

9(2)(a)

From: 9(2)(a) 9(2)(a) <9(2)(a)@wrc.govt.nz>
Sent: Tuesday, 13 July 2021 3:03 PM
To: 9(2)(a) 9(2)(a) <9(2)(a)9(2)(a)@niwa.co.nz>
Subject: RE: data transfers

Hi 9(2)(a)

Sending as Tideda is fine!

The attached Tideda file contains 370 (Haast Roaring Billy rainfall). If it works, I'll send the rest through as one.

Just to note:

- The Cropp site you've got listed isn't ours. I think that belongs to NIWA (ours is Cropp Rv @ Base OTA). I can give you our Cropp data though.
- For the two sets of Hokitika RF and WL, I'm assuming one of those is for Colliers Ck?
- The two Karamea rainfalls, they would be the Township and Garibaldi (alpine) sites we run? (the first site number doesn't match up with ours).

Sorry, just trying to make sure I send you through the correct data.

9(2)(a)

9(2)(a)
+64 9(2)(a) | Mon, Tues, Thurs, Fri | West Coast Regional Council

From: 9(2)(a) 9(2)(a) <9(2)(a)9(2)(a)@niwa.co.nz>
Sent: Tuesday, July 13, 2021 2:26 PM
To: 9(2)(a) 9(2)(a) <9(2)(a)@wrc.govt.nz>
Subject: RE: data transfers

This email is from an external sender. Please be careful with any links or attachments.

Hi 9(2)(a)

I'm not sure how easy this will be for you, but the data in the Tideda file needs to have the yellow highlighted number. Is that achievable?

150 = 91407004 Ahaura at WCRC Primary

- # 151 = 214711 Ahaura at WCRC R/G
- # 182 = Buller at Te Kuha Stage
- # 190 = Hokitika rain
- # 192 = Hokitika WL
- # 193 = 95102004 Karamea at WCRC Primary
- # 194 = 123211 Karamea at WCRC R/G
- # 203 = 30191301 Cropp Hut at WCRC Spoon
- # 205 = 20191302 Cropp Hut at WCRC R/G
- # 207 = 91401004 Grey Dobson at WCRC Primary
- # 330 = Karamea rain
- # 346 = Hokitika Rv @ Gorge. Rain
- # 348 = Hokitika Rv @ Gorge. water level
- # 370 = Haast Rv @ Roaring Billy. Rain
- # 372 = Haast Rv @ Roaring Billy. water level

Cheers

9(2)(a)

From: 9(2)(a) 9(2)(a) <9(2)(a)@wrc.govt.nz>
Sent: Tuesday, 13 July 2021 2:19 PM
To: 9(2)(a) 9(2)(a) <9(2)(a)9(2)(a)@niwa.co.nz>
Subject: RE: data transfers

Hi 9(2)(a)

Yes, I can.

However, I'm unsure what sites to give you as the three digits underneath the 'untitled' don't appear to relate to anything in our system.

Are you able to provide a list of site names or numbers? Or I can just give you an update of all our sites.

Thanks,

9(2)(a)

9(2)(a)
+64 9(2)(a) Mon, Tues, Thurs, Fri | West Coast Regional Council

From: 9(2)(a) 9(2)(a) <9(2)(a)9(2)(a)@niwa.co.nz>
Sent: Tuesday, July 13, 2021 1:58 PM
To: 9(2)(a) 9(2)(a) <9(2)(a)@wrc.govt.nz>
Cc: 9(2)(a) 9(2)(a) <9(2)(a)@niwa.co.nz>; 9(2)(a) 9(2)(a) <9(2)(a)@wrc.govt.nz>
Subject: RE: data transfers

This email is from an external sender. Please be careful with any links or attachments.

Hi 9(2)(a)

Could you provide the update in tideda format?

If that's possible then that would be appreciated.

Cheers

9(2)(a)

From: 9(2)(a) 9(2)(a) <9(2)(a)@wrc.govt.nz>
Sent: Tuesday, 13 July 2021 1:50 PM
To: 9(2)(a) 9(2)(a) <9(2)(a)9(2)(a)@niwa.co.nz>
Cc: 9(2)(a) 9(2)(a) <9(2)(a)@niwa.co.nz>; 9(2)(a) 9(2)(a) <9(2)(a)@wrc.govt.nz>
Subject: RE: data transfers

Hi 9(2)(a)

Thanks very much for your email.

I am aware our URL link hasn't been working for NIWA for few months now. I've been working with our IT department and Hills to get this fixed. But unfortunately, haven't had any success so far, sorry.

At this stage we've decided to create a new URL and set this up properly so that only WCRC hydrology data is available through it. However, this new URL is a few weeks away as I'm just getting some final things answered by Hills.

In the meantime, could I provide you with an update of the sites that you require?

Best,

9(2)(a)

9(2)(a)

+64 21 521 413 | Mon, Tues, Thurs, Fri | West Coast Regional Council

From: 9(2)(a) 9(2)(a) <9(2)(a)9(2)(a)@niwa.co.nz>
Sent: Tuesday, July 13, 2021 9:07 AM
To: 9(2)(a) 9(2)(a) <9(2)(a)@wrc.govt.nz>
Cc: 9(2)(a) 9(2)(a) <9(2)(a)@niwa.co.nz>
Subject: data transfers

This email is from an external sender. Please be careful with any links or attachments.

Hi 9(2)(a)

We haven't received some data from you for quite some time. Are you aware of any issues with these sites highlighted below.

File Edit View Data Graph Table Move Manage Entry Extras Comments Window Help

OPT OPT OPT

Site 133104 < Untitled >

B:\RDA\GYM\WCRC.MTD

- 150: < Untitled >
- 151: < Untitled >
- 182: < Untitled >
- 190: < Untitled >
- 192: < Untitled >
- 193: < Untitled >
- 194: < Untitled >
- 201: < Untitled >
- 203: < Untitled >
- 204: < Untitled >
- 205: < Untitled >
- 207: < Untitled >
- 330: < Untitled >
- 346: < Untitled >
- 348: < Untitled >
- 370: < Untitled >
- 372: < Untitled >
- 386: < Untitled >
- 494: < Untitled >
- 88801: < Untitled >
- 218502: < Untitled >
- 301902: < Untitled >
- 303105: < Untitled >
- 304212: < Untitled >
- 8880101: < Untitled >
- 8880102: < Untitled >

< Untitled >	190	5-May-2009	11:15:00	30-Apr-2021	06:00:00
< Untitled >	192	3-Jun-2009	13:52:00	8-Jan-2013	06:00:00
< Untitled >	193	5-Jun-2009	13:54:00	30-Apr-2021	09:10:00
< Untitled >	194	5-Jun-2009	13:53:00	23-May-2013	11:00:00
< Untitled >	201	30-Dec-1899	00:00:00	30-Apr-2021	09:10:00
< Untitled >	203	7-Oct-2009	09:05:00	16-Dec-2013	05:07:00
< Untitled >	204	7-Oct-2009	10:39:00	5-Jul-2013	12:00:00
< Untitled >	205	30-Aug-2009	13:30:00	30-Apr-2021	06:00:00
< Untitled >	207	6-Jul-2009	07:15:00	16-Sep-2016	09:05:00
< Untitled >	330	12-Nov-2010	13:51:00	30-Apr-2021	09:00:00
< Untitled >	346	5-Jun-2011	05:15:00	30-Apr-2021	09:05:00
< Untitled >	348	5-Jun-2011	05:30:00	30-Apr-2021	09:05:00
< Untitled >	370	30-Jun-2011	12:15:00	30-Apr-2021	09:05:00
< Untitled >	372	29-Jun-2011	16:16:00	30-Apr-2021	09:05:00
< Untitled >	386	22-Aug-2011	16:27:33	30-Apr-2021	06:00:00
< Untitled >	494	2-Jun-2015	09:52:00	30-Apr-2021	06:00:00
< Untitled >	88801	18-Jul-2013	14:00:00	7-Oct-2020	14:30:00
< Untitled >	218502	12-Jul-2010	09:00:00	13-Jul-2021	07:00:00
< Untitled >	301902	11-Jul-2010	12:50:00	13-Jul-2021	08:00:00
< Untitled >	303105	18-Jul-2013	14:00:00	13-Jul-2021	08:30:00
< Untitled >	304212	27-Jul-2020	10:50:00	13-Jul-2021	08:00:00
< Untitled >	8880101	8-Oct-2020	13:45:00	13-Jul-2021	08:30:00
< Untitled >	8880102	8-Oct-2020	13:45:00	13-Jul-2021	08:30:00

Cheers

9(2)(a)

Melissa Bray

From: [REDACTED] [REDACTED] <[REDACTED]>@wrc.govt.nz
Sent: Tuesday, 13 July 2021 3:45 pm
To: [REDACTED] [REDACTED]
Subject: RE: data transfers

Hi [REDACTED]

Sorry about that, it seems our version of Tideda is quite old. I'm just trying to locate the more recent version.

Is xml no good?

[REDACTED]

[REDACTED] [REDACTED]
+64 21 [REDACTED] | Mon, Tues, Thurs, Fri | West Coast Regional Council

From: [REDACTED] [REDACTED] <[REDACTED]>@niwa.co.nz
Sent: Tuesday, July 13, 2021 3:21 PM
To: [REDACTED] [REDACTED] <[REDACTED]>@wrc.govt.nz
Subject: RE: data transfers

This email is from an external sender. Please be careful with any links or attachments.

Hi [REDACTED]

The Tideda file was empty?

The screenshot shows a software application window with a menu bar (File, Edit, View, Data, Graph, Table, Move, Manage, Entry, Extras, Comments, Window, Help) and a toolbar with various icons. The window title is "Site 370 < Untitled >". The main content area displays a file scan report for "C:\Temp\370.mtd". The report text is as follows:

```
~~~~ NIWA Tideda ~~~~ NIWA  
PSCAN of C:\Temp\370.mtd  
(This is not a version 4 file)  
  
SITE      START TIME      FINISH TIME  
  
Data Size =    0.0 Kbytes    File Size=    48.0 Kbytes  
  
End of process
```