Agenda

Westport Flood Resilience Steering Group Meeting 3

Date: 4th August 2023

Time: 10:00am – 11:00am

Location: Via Zoom

https://us06web.zoom.us/j/86832418113?pwd=cVJQWXp1bE5ZbmNuVjZDbFRsNkVDdz09

Meeting ID: 868 3241 8113

Passcode: 684051

Members: Mike Mendonça (Chair) Darryl Lew, CEO, WCRC

Peter Haddock, Chair, WCRC Sean Judd, CEO, BDC

Brett Cummings, Deputy Chair WCRC Paul Barker, DIA

Mayor Jamie Cleine, Mayor, BDC Simon Chambers, NEMA

Deputy Mayor Andrew Basher, BDC

In Attendance: Daniel Bellam, DIA Sam Scott, WCRC

Claire Brown, WCRC Nic Costley

Fiona Thomson, WCRC

Apologies: Francois Tumahai, Ngati Waewae

No	Item		Lead	
1	Welcome		Chair	5m
2	Apologies		Chair	
3	Declarations of Interest		Chair	
4	Confirmation of Minutes		Chair	5m
5	Replenishment of WCRC Catastrophe Fund – further information to be tabled at meeting	Report and discussion	WCRC	10m
6	Improved CDEM Management	Report	NEMA	10m
7	Wave/sea level gauge funding drawdown request	Report	WCEM	10m
8	Communications and engagement from this meeting	Discussion	Chair	10m
9	Next meeting (25 th August)		Chair	
10	Closure		Chair	

Draft Westport Flood Resilience Steering Group Minutes

Friday, 21st July 2023 10.00am - noon

Present:

Mike Mendonça, Chair Brett Cummings, Deputy Chair WCRC

Mayor Jamie Cleine, BDC Darryl Lew, CEO, WCRC

Sean Judd, BDC CEO Paul Barker, DIA

Peter Haddock, Chair WCRC Simon Chambers, NEMA

In Attendance:

Rachel Vaughan, WCRC, for item 10 Nichola Costley, WCRC Claire Brown, WCEM, for items 13,14 Daniel Bellam, DIA

1. Welcome and Introduction

The Chair welcomed Steering Group members, and those in attendance.

2. Apologies

Apologies were accepted from Francois Tumahai, Ngāti Waewae, and from Deputy Mayor Andrew Basher, BDC.

3. **Declaration of interest**

Completed interest declarations forms were received from:

Mike Mendonça
 Cr Cummings

Mayor Cleine
 Darryl Lew

Chair Haddock
 Sean Judd

4. Confirmation of Minutes

The minutes from the previous meeting (23rd June) were confirmed.

5. Terms of Reference

The Steering Group **approved** the Terms of Reference (TOR). It was agreed that the TOR will be made available on the WCRC website, and with a link from the BDC website.

6. Funding for Steering Group external support

The Steering Group **approved** the external programme support for drawdown as recommended for the functioning of the Steering Group.

7. Ring Bank – progress to agreed final design

The Steering Group was provided with an overview of the *Progress to an Agreed Final Design of the Kawatiri Westport Flood Resilience Project* paper.

The Steering Group **approved** Graeme Campbell and Peter Blackwood to review the G & E Consultants Ltd Engineering Report Business Case – Engineering Design and Risk Assessment in conjunction with the Tonkin and Taylor technical review.

The Steering Group agreed to issue a media release outlining progress with this item.

8. Quick wins proposal

The Steering Group **noted** the four workstreams to be carried out by West Coast Regional Council (WCRC) deemed 'quick wins' with significant benefits to the community via reducing floodwater inundation in the following areas:

Floating Lagoon

• Abattoir Drain at Railway Bridge

Averys

McKenna Road

WCRC will fund the four workstreams above as part of its co-investment funding.

It was noted that external communications about this item will be included as part of the media release in item 7.

9. Replenishment of the West Coast Regional Council Catastrophe Fund

The Steering Group agreed to:

- Endorse in principle the request to draw down the agreed \$1m in funding to replenish the catastrophe fund, subject to further information, and
- Liaise with DIA on the further detail needed for the release of the \$1m funding to replenish the fund as soon as is practicable.

The Steering Group noted that the further information required to progress the drawdown request for the fund includes:

- A brief description of the purpose of the fund.
- Details on how the fund was depleted.
- A summary of the WCRC current financial situation.
- Explanation of how replenishment will impact on the current financial position of WCRC and the ability to manage future natural hazard risk.

The Steering Group agreed to progress work on this item at pace.

10. Organs Island reafforestation

The Steering Group received an update from WCRC on the options being considered to progress reafforestation of Organs Island.

WCRC will bring a report to set out options to a future Steering Group meeting. DIA will work with WCRC to confirm further information required for drawdowns.

11. Feasibility study strategic land purchase

The Steering Group requested an update on this item from BDC at the 25th August meeting.

12. Alma Road development plan

The Steering Group requested an update on this item from BDC at the 25th August meeting.

13. Improved CDEM Management

The Steering Group **agreed** <u>in principle</u> to endorse the drawdown of funds to allow emergency management work to progress, subject to further details being provided, including:

- Further clarity on the scope of proposed work and what has already been completed.
- A project plan outlining how this item would be implemented.
- The project plan should incorporate how an outline evacuation plan will be developed.
- A model for publicly communicating risk, evacuation details and other information.
- Designing the work into tranches to provide for with staged funding drawdowns to enable timely completion of work.

NEMA agreed to work with WCRC to progress this item at pace.

14. Wave/sea level gauge funding drawdown request

The Steering Group **approved** in principle the request to draw down \$250,000 to progress the sea level monitor/tide gauge and GNSS as recommended in the business case, subject to further detail being provided in an updated report, including:

- Further detail the equipment to be purchased including cost, availability and a high level timeframe for installation and operation.
- Further detail on how the investment fits with other emergency management capability including previous investment in early warning capability for the Buller catchment.

The Steering Group agreed to progress this item at pace.

15. Communications and Engagement from this meeting

The Steering Group **noted**:

- The need to proactively communicate with the community.
- A media release will be drafted summarising key aspects of this meeting and outlining the next steps for the project.
- Meeting minutes from the last meeting will be made public on the WCRC website.

16. Next meeting

The Steering Group agreed to meet remotely on 4th August to revisit and progress the following work programme items:

- Item 9 Replenishment of WCRC Catastrophe Fund.
- Item 13 Improved CDEM Management.
- Item 14 Wave/sea level gauge funding drawdown request.

The Steering Group agreed to meet again in person on 25th August at BDC offices in Westport.

The meeting closed at 12:10pm

Westport Flood Resilience Steering Group

Title: Further information to support the request to replenish the West

Coast Regional Council's Catastrophe Fund

Date: 2 August 2023

Principal Author: Nichola Costley - Contractor

Authorised by: Fiona Thomson – Planning and Science Manager, WCRC

Purpose

1. To provide the additional information sought by the Westport Flood Resilience Steering Group to enable the Council to progress with liaising with the Department of Internal Affairs for the release of the agreed \$1 million funding to replenish the West Coast Regional Council's Catastrophe Fund.

Recommendations

- 2. It is recommended that the Westport Flood Resilient Steering Group:
 - Notes the additional information provided as requested at its meeting on 21 July 2023.

Background

- 3. In 2011 following the Canterbury earthquakes, the West Coast Regional Council and other Councils exited the Local Authority Protection Programme (LAPP) as it was going to become unaffordable to continue this insurance programme. Council instead established a designated Catastrophe Fund with an initial deposit of \$500,000; augmented by annual deposits of \$50,000.
- 4. This money was invested with Council's fund manager, JB Were. Interest earned on the fund is retained 100% within the Catastrophe Fund.
- 5. When Council obtained insurance cover with Lloyds of London on its infrastructure assets (river, drainage, and coastal protection assets) with a grouping of South Island Councils, it retained the Catastrophe Fund for use in an emergency, and in particular, the payment of insurance excesses.
- 6. In summary initially the purpose of the Catastrophe Fund was to provide potential funds when Council no longer had insurance after exiting LAPP. After Council obtained insurance cover from Lloyds, the Catastrophe Fund's purpose was to cover insurance excess payments and to be available should additional funds be needed immediately post-event.
- 7. Council is able to access infrastructure asset funding from the National Emergency Management Agency (NEMA) in the case of an event with a 60%/40% contribution from NEMA under certain circumstances.
- 8. In March 2019 a severe weather event resulted in the partial destruction of the Milton and Others stopbank a key piece of the Lower Waiho Rating District flood protection infrastructure. The Catastrophe Fund quickly funded the excess required as part of the wider insurance claim.

Use of the Catastrophe Fund following Westport floods

- 9. During the flood event of July 2021, a 260m length of bank erosion formed on the true right bank of the Buller River upstream of the O'Conor Home (a rest home and residential care facility) and an erosion scour occurred to a section of historic rock training wall adjacent to Organ's Island. Information presented to Council indicated that if not acted upon, they could place Westport at risk, ahead of the more comprehensive flood protection planned for construction. The estimated cost of the O'Conor Home erosion scour was \$923,351 and the Organs Island rock wall \$1,701,762.
- 10. Council was unable to guarantee any certainty of funding co-investment at the time. Certainty would only be secured through the Kawatiri Business Case under development to be submitted by 30 June 2022.
- 11. To fund these urgent works, Council decided to liquidate its Catastrophe Fund (totaling \$982,184 at the time) and increase debt funded by the Local Government Funding Authority.
- 12. Funding to reimburse Council's costs on undertaking these works were presented in the Kawatiri Business Case. An application of \$3.3 million was sought to include the two projects funded by Council and a second stage of additional work to the O'Connor Home scour.

Importance of the Catastrophe Fund to Council

13. Since the liquidation of the Catastrophe Fund, Council has limited reserves of funding available should an event similar in nature occur. This leaves Council, and its communities, vulnerable to other natural hazard shocks.

Restoring Council's Catastrophe Fund

- 14. In Budget 2023, the Government set aside \$22.9 million to increase Westport's flood resilience in response to the co-investment proposal and the Government's evaluation of the proposal. A contribution of \$1 million was approved to assist with restoring Council's funds to pre-flooding levels.
- 15. At the 21 July 2023 Resilient Westport Steering Group meeting, a recommendation to endorse the release of the agreed \$1 million funding was presented.
- 16. The Steering Group endorsed the recommendation in principle on the basis that further information was provided in regards to:
 - The background to the fund
 - How the fund was used to support the Westport community following the floods in 2021
 - The financial context of the fund
 - The impact of a liquidated fund on the Council and the community.
- 17. This report provides the additional information sought by the Steering Group to enable the Council to progress with liaising with the Department of Internal Affairs for the release of the agreed \$1 million funding.
- 18. Due to staffing constraints further information is still being prepared to provide a:

- a. Summary of the Council's current financial situation (tracking against budget, overall reserves, debt levels and revenue); and
- b. An explanation of how the replenishment will impact on current financials and ability of Council to manage future natural hazard risk.
- 19. This information will be provided to the Steering Group as soon as it has been prepared.

Resilient Buller Steering Group

Title: BUILD RESILIENCE THROUGH IMPROVED EMERGENCY

MANAGEMENT ENGAGEMENT AND PLANNING

Date: 4 August 2023

Principal Author: Claire Brown, Group Manager, West Coast Emergency

Management

Authorised by: Sam Scott, Infrastructure Manager

Purpose

 To seek Steering Group endorsement of the proposed project scope for the civil defence emergency management (referred to from here on as West Coast Emergency Management or WCEM) related aspects of the Westport Flood Resilience Programme and agree to the drawdown of funds to proceed with this work.

Recommendations

- 2. It is recommended that the Resilient Buller Steering Group:
 - a. **Endorse** the high-level project plan to support implement the programme of work that requires a drawdown of funds over two tranches
 - Endorse that the project is monitored and reviewed through existing governance and executive arrangements for West Coast Emergency Management that involves both West Coast Regional Council, Buller District Council, Iwi and NEMA
 - c. **Endorse** an initial drawdown of \$40k for tranche one.

Background

- 3. On 21 July 2023 the steering group agreed in principle on the drawdown of funds to proceed with the work subject to further information on the scope of the project plan, and how this would be phased over the two years.
- 4. Engagement has started with Buller District Council (BDC), West Coast Regional Council (WCRC) and National Emergency Management Agency (NEMA). A high-level awareness of the project has been shared with the member of the WCEM Coordination Executive Group (CEG), that also includes Iwi. NEMA and BDC both contributed to the project scope set out in this report.

Governance, Executive and Working Groups

5. WCEM is governed by the WCEM Joint Committee made up of the Mayors of each district council, the Chair of the Regional Council, and Iwi. Mayor Jamie Cleine is the Chair of the WCEM Joint Committee for this current triennium. The WCEM Joint committee is provided operational advice and guidance from CEG, comprising council Chief Executives, Iwi, Health, FENZ, Police, St John, Department of Conservation, and the Group Controller. The development and progression of the work will be reported to the CEG and Joint Committee.

6. Given this, it is recommended the existing structures are utilised. However, project planning requires direct and close engagement of Westport stakeholders. Understanding who this is, and how this occurs will be an initial activity of the Project Manager. This is key to ensuring good community engagement.

Project Scope

- 7. The objectives listed in the June 2022 Kawatiri Business Case under 'Accommodation Reduce the consequences of the hazard' are incorporated into the project plan (refer pg.6-7 of Appendix Two), for example:
 - i. the emphasis on public awareness and community engagement,
 - ii. integrating updated flood modelling and projection works into evacuation planning,
 - iii. building critical infrastructure into all elements of planning, response and recovery and
 - iv. developing blueprint activation plan for Community Hub and navigation services
 - v. improving digital and IT systems to support public education and preparedness, and utilise in response.
- 8. There is an overarching emphasis on evacuation planning. The objectives listed above are all key elements of this planning activity.
- 9. The project is designed to occur over three phases. Phasing this work is crucial so that it connects to the 'Protection' initiatives as they too take shape.
- 10. A high-level project scope is set out in Appendix One. The three phases are:

Phase One – Initiate

- 11. The first phase includes recruitment, followed by aspects not contingent on the other flood resilient programme of works. It focuses on detailed planning of 1) evacuation planning, 2) work to strengthen the linkages and coordinated planning across critical infrastructure, and 3) boosting the digital systems and tools for displaying and sharing data through GIS emergency response platform.
- 12. Recruitment discussions with role description will be advertised in September for fixed term employee for the duration of the project (24 months). Secondment opportunities will also be considered for this role.
- 13. An additional support resource (0.5FTE contract) will be required from January 2024 until the completion of the project (20 months) to support stakeholder engagement and the communication strategy.

Phase Two - Deliver

14. Phase two focuses on evacuation planning and the range of elements involved, such as significant stakeholder and community engagement, and evaluation. This will guide what work continues after year two.

Phase Three - Sustain

15. Phase three focuses on tools and mechanisms to ensure what has been developed is sustained going forward and potentially utilised to template for other parts of the region. This is expected to involve Long Term Planning discussions across councils, in addition to a review of central government funding options.

APPENDICES

- 1. Westport Flood Resilience Programme High level summary project and phases
- 2. Evacuation Planning **Draft** Project Plan

APPENDIX ONE

West Coast Emergency Management - Westport Flood Resilience Programme

High Level Summary – Project and Phases			
Phase	Activities	Indicative Costs	Comments
Initiate September – December 2023 (4 months)	Recruitment and Induction Detailed project planning Stakeholder engagement and communication strategy Evacuation Planning Critical Infrastructure Planning and response tools and system COST: Project Lead 1.0 FTE	\$40k	Recruitment process will need to start now to meet timeline.
Deliver Jan 2024 – June 2025 (17 months)	To be confirmed on approval of detailed project plan and costings COST: Project Lead (1 FTE) Stakeholder engagement and Communications support role (.5FTE Contract) Opex and Engagement costs Disbursements	\$391k	See initial draft Evacuation Project Plan for discussion (below).
Sustain July - Sep 2025 onwards (3 months)	To be confirmed COST: Project Lead (1 FTE) Stakeholder engagement and Communications support role (.5FTE Contract) Opex and Engagement costs Disbursements	\$69k	Will require long term plan discussions for future work programmes in LTP 2024-2027.

Evacuation Planning Draft Project Plan

Project Description:

The purpose of this project is to develop a set of scenarios and options for evacuation planning to address flood risk (fluvial, pluvial, and coastal/tidal) in the urban areas of Westport.

The project will focus on evacuation planning within *multiple* study areas:

- The intertidal area of Carters Beach
- The intertidal Orowaiti up to Snodgrass Road
- Other areas to be identified following the detailed description from the BBC and awaiting the Independent Review of the Kawatiri Flood Resilience Project Report.

In each area evacuation planning under a number of scenarios will be developed. These will use one or more of the proposed engineering mitigation options that are currently being assessed. The available mitigation options include:

- Do nothing
- Do minimum
- Engineered solutions including:
 - o 'hard' structures like stopbanks, revetments and/or floodwalls,
 - 'soft' structures like shore replenishment, naturalising edges with planting wetland buffers
 - o a hybrid approach (a combination of natural and built infrastructure)
- Adaptive building strategies including targeted house raising

The key activities involved in this project are:

- Gap analysis of the existing warning systems and information available. Existing gaps
 will be addressed through development of new warning systems. The warning systems
 (including river flow and stage information) and information (including inundation
 modelling, impact assessments and public messaging) must be clearly and succinctly
 summarised.
- Develop a range of evacuation options for each area and evaluate the various evacuations options within each scenario.
- The options will need to consider a range of return period events (10, 50, 100, 200 and 500 yr) for each study area and is to include the influence of sea level rise on groundwater and any consequential impacts on the overall risk.
- Understanding the impacts of the proposed defence options on each proposal for evacuation
- Develop an Initial Action Plan (IAP) for use of the Buller District Council EOC Incident Management Team. The initial actions will be need to provide sufficient direction for the Local Controller and function leads in the early phases of a severe weather event.
- Develop a blue-print to activate a Community Hub and Navigator program in an evacuation that provides support to connect people with agencies that provide welfare,

financial and mental health support. Identify community needs and develop solutions and opportunities that address these needs (projects, initiatives, relationships, structures, processes)

- Support community engagement (meetings or other more informal events) across the Buller district that contributes towards good evacuation outcomes.
- Develop and/or strengthen a network of community-based volunteers and organisations to promote evacuation readiness and champion resilience.
- Build and maintain relationships and networks with local social support services (NGOs, governmental departments such as MSD and Te Whatu Ora, and community 'connectors') to ensure community needs resulting from evacuations are met in a responsive manner.
- Work with central government (NEMA, DIA, MfE etc) to access resourcing to support evacuations and the development and delivery of important psychosocial services on behalf of the community.

Project Objectives

The objective of the project is to develop a complete understanding of evacuations and initial actions for emergency operations centre IMT for evacuation management in each study area. It will answer the questions:

- 1. How can the evacuation options be best be communicated to ensure public safety?
- 2. What are the costs of each evacuation scenario?
- 3. What happens if Council chooses to 'do nothing'?
- 4. When does each evacuation scenario (or parts thereof) need to be implemented?
- 5. What pre-emptive actions need to be carried out now (i.e. prior to an event) and which agency is responsible for those actions?

Deliverables

The project deliverables are set out below:

- 1. Summary report of existing studies and information relating to evacuation planning.
- Gap analysis report identifying warning system and information and suitable methods for filling or managing the risks of the gaps.
- Interim reporting as detailed scenarios are developed for each study area. This can be in the form of graphics or short reports supported by flood mapping and model results.
- 4. Draft and final technical report covering all four study areas, including results of hydraulic modelling, scenario evaluation, recommendations for further investigations, and initial action plans for each scenario. Organisation of and presentation at a workshop or series of workshops to discuss the various scenarios.

- 5. A simplified draft and final summary report suitable for public distribution, including graphic representations of different evacuation options available and the timeline for decisions and implementation.
- Hand over to Council of key project data including: hydraulic modelling files and GIS
 compatible spatial dataset with proposed scenarios for integration with Council's GIS
 and asset management system.

Westport Flood Resilience Steering Group

Title: Wave and Sea Level Gauge Funding – further information

Date: 2 August 2023

Principal Author: Nichola Costley – Contractor, Fiona Thomson – Planning and Science

Manager, WCRC

Authorised by: Fiona Thomson – Planning and Science Manager, WCRC

Purpose

1. To provide information sought by the Westport Flood Resilience Steering Group to enable the Council to progress with liaising with the Department of Internal Affairs for the release of the agreed \$250,000 funding for additional monitoring capability.

Recommendations

- 2. It is recommended that the Westport Flood Resilient Steering Group:
 - a. **Note** the additional information obtained as requested at its meeting on 21 July 2023.
 - b. **Approve** funding drawdown request of \$196,111 for tranche 1 to undertake groundwater monitoring and sea level monitoring while further scoping work takes place for seismic monitoring.

Background

- 3. The Kawatiri Business Case submitted in June 2022 sought funding of wave and sea level gauge to provide inform future hazard management decisions. With no current accurate sea level gauge on the West Coast it was considered that that the coastal boundary conditions used in the modelling would have significant uncertainty. It was also noted that there was uncertainty associated with local land movement. Installation of such a device would provide data to fill these information gaps.
- 4. In May 2023, Government confirmed funding of \$250,000 for purchase, installation and data collection modeling of a sea level monitoring and tidal gauge and seismic monitoring on land.
- 5. The West Coast Regional Council sought approval from the Westport Flood Resilience Steering Group to drawdown the \$250,000 at its meeting on 21 July 2023. Following the drawdown of funds, Council had committed to undertake complete assessment of the tidal and land monitoring requirements, audit best practical options and be assured of the design prior to progressing to purchase of equipment.
- 6. While the Steering Group approved the drawdown in principle, further information was sought about:
 - What it will cost
 - When will installation can occur and the timeframes around this
 - The status of current investments and how the wave and sea level gauge will feed into emergency management.

 Council has recently obtained copies of the information that led to the initial inclusion of the gauge in the Business Case and is undertaking due diligence of the project. From this, further information has presented which warrants consideration of the Steering Group.

Groundwater

- 8. There is no continuous groundwater level monitoring in Westport (or anywhere on the West Coast). Rising groundwater levels have been noted as a concern looking to the future, particularly in the low lying areas of Westport.
- 9. There is opportunity to have six narrow-gauge bores to be drilled around Westport with the live data telemetered to the Council systems to provide real time information on groundwater levels.
- 10. Buller District Council are undertaking some investigation in this space and there is an opportunity for the Regional Council to align with this work and provide co-funding through the funding for additional monitoring capability.
- 11. The inclusion of groundwater information data in the flood warning modelling will allow an understanding of the fluctuations and the impacts of ground water and how that correlates with rainfall and river flow data. It will allow future predictions of how groundwater will behave within Westport during flood events and help inform evacuation plans. This will tie in with sea level data to discover trends that we can use as triggers in future.

Sea level gauge / tidal monitoring

- 12. There are currently two sea level gauges on the West Coast, Charleston and on the wharf in Westport. The gauge on the wharf in Westport is influenced by the river flows and the structure is not stable enough to give completely accurate data. The site at Charleston is not surveyed into a datum point and is therefore not accurate enough to inform this project nor is it believed to be reliable.
- 13. Current modelling outputs using the existing other sea level gauges on the East Coast and West Coast of the North Island have there being an approximate 7m variance in sea level between Greymouth and Hokitika. This is not possible and demonstrates the lack of accuracy for status quo.
- 14. Understanding accurate sea level during a flood event is vital information to feed into the forecasting model so that we can understand the interactions of tides in future floods as will as being able to accurately adjust the forecast model to take account of sea level rise over time.
- 15. The equipment purchase, implementation of the installation, ongoing maintenance and provision of information to the model would be undertaken by NIWA on Council's behalf.
- 16. The monitoring buoy will cost with an approximate three month lead in time once ordered. This will give time for the Council data systems and flood model to be adapted to receive the information and make arrangements for the buoy to be surveyed into a datum once it is placed.
- 17. It is recognized that the ideal location for the monitoring buoy would be approximately 2km offshore, to avoid wave interference. The lead in time will allow for the exact location to be identified.

Status of current investments and how the wave and sea level gauge will feed into emergency management

- 18. Significant investment into flood warning to provide an accurate prediction of flooding with an 8-hour lead time for evacuation planning for Westport has been undertaken in recent years.
- 19. \$555,000 has been invested in the advanced flood warning system which was funded by both Central Government and the local community.
- 20. The Advanced Flood Warning project included the installation of new telemetered sites in the Buller catchment. The second phase of the project is the forecasting computer model to collect and analyse the data collected by the telemetry sites which is a five-year process. It is currently in its second year of data collection.
- 21. The provision of accurate sea-level, and groundwater, information would complement the Advanced flood Warning Model information.

Tranche 1

17. Council recommends that the funding approved be released in two tranches. Within the first tranche:

Groundwater Monitoring

- 18. \$76,111 to be released immediately to progress the groundwater monitoring capability.
- 19. This work includes the drilling of six narrow-gauge bores around Westport. Locations to be determined in conjunction with NIWA. Water levels would be monitored and telemetered to Council.
- 20. Estimated time for this work to be completed is four months.

Sea Level Monitoring

21. \$120,000 to be released immediately to fund the purchase of the monitoring buoy, NIWA to scope the appropriate location, costs will include boat hire, personnel time completing the location exercise and implementing the site, costs of surveying the buoy to a datum, calibration and receipt of and inclusion of data into the model.

Estimated costs

Project: Groundwater	Estimated Cost
Groundwater bore drilling (6 bore holes @ \$5,000/bore)	
Groundwater telemetry*	
Consents	
Staff costs (\$1,500 per site)	
Consultant costs	
Project: Sea Level Monitoring	
Purchase of Buoy – specify details from application	
NIWA consultant time, scoping, transport, site implementation, surveying, calibrating, adjustments to model for data receipt.	
TOTAL	\$196,111

Tranche 2

22. Tranche 2 will be to achieve the seismic component sought in the funding application. This requires more time to scope with GNS what the appropriate methodology will be and what those exact costs will be. Council asks permission to build this scope and return to the committee for the required funds, noting that it will be required to be within the total of \$250,000 allocated.

Attachments

1. *Van Walt - Telemetry systems

QUOTATION



Unit A 21 Gordon Road Wanaka 9305 New Zealand

Email: salesnz@vanwalt.com Tel: +64 (0)3443 5326 GST Number: 109-413-704

Quote Number	00006532	Created Date	31/07/2023
Contact Name	Samwell Warren		
Phone	03 768 0466		
Email	samwell.warren@wcrc.govt.nz		
Bill To Name	West Coast Regional Council	Ship To Name	West Coast Regional Council
Bill To	388 Main Siouth Road Greymouth	Ship To	Greymouth

Greymouth 7805 New Zealand

Product Code	Product	Sales Price	Quantity	Total Price
VWKISS	vanwaltKISS - Keep it Simple Sensing Unit	N2	6.00	NZD
DELS	Delivery South Island	N	1.00	NZ

Additional Comments

5% Discount has been applied for 5 or more units

Quotation valid for 30 days.

Van Walt Ltd – Unit A 21 Gordon Road - Wanaka 9305 – www.vanwalt.com