From: BDC Lgoima

To:

Subject: Official Information Request for Council Report - Kawatiri Dredge Ref: 041/22

Date: Friday, 17 June 2022 3:39:00 pm

Attachments: BDC-Buller-Mouth-Modelling-Memo LandSeaRiver Oct 2016.pdf

image003.png

Dear

We refer to your official information request dated 10 June 2022 for Council paper related to the Kawatiri Dredge.

Please find the August 2017 Council paper on the Westport Harbour via the below link;

http://bullerdc.govt.nz/wp-content/uploads/2017/08/Westport-Harbour-Report.pdf

The report referred to in the paper is attached to this email.

You have the right to seek an investigation and review by the Ombudsman of this decision. Information about how to make a complaint is available at www.ombudsman.parliament.nz or freephone 0800 802 602.

If you wish to discuss this decision with us, please feel free to contact the Buller District Council by return email to lgoima@bdc.govt.nz.

Please note that it is our policy to proactively release our responses to official information requests where possible. Our response to your request will be published shortly at https://bullerdc.govt.nz/district-council/your-council/request-for-official-information/responses-to-lgoima-requests/ with your personal information removed.

Kind regards

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BULLER DISTRICT COUNCIL

FOR THE MEETING OF 23 AUGUST 2017

Report for Agenda Item No 3

Prepared by - Andy Gowland-Douglas - Chief Executive

Reviewed by - Garry Howard - Mayor

Westport Harbour Ltd and MV Kawatiri

Report Summary

This report presents the options and recommendations for Westport Harbour going forward.

Draft Recommendation

That Council resolves to:

- c) Contract Buller Holdings Limited to sell the dredge as soon as possible.
- d) Recommend to Buller Holdings Limited that the operation of the port be shifted to WestReef Services Limited but that Westport Harbour Ltd is retained as a shell company for any future ventures.

Issues and Discussion Background

In 2013 Holcim announced the closure of its Westport plant in favour of silo facilities in Timaru and Auckland taking imported cement from Japan. The MV Westport took the final load of Cape Foulwind cement from the port on 29 June 2016. Up until then Holcim NZ Limited had been the principal port user since 1970, shipping cement from the port of Westport on a weekly basis using their bulk cement ships Milburn Carrier II and Westport. On an annual basis up to 430,000 tons of cement was shipped from the Port of Westport to Onehunga, Wellington, Lyttelton, New Plymouth, Nelson, Dunedin and Picton. Coal was also barged from the harbour in the past, but this ceased in 2005 and due to the downturn in the industry and other logistical and cost factors there is little prospect of this happening again in the short term.

The Holcim contract alone more than covered the cost of running the port and the dredge which meant the harbour was a financially viable going concern. Since July 2016 this is no longer the case and Westport Harbour Ltd (WHL) posted a loss of \$200,899, which would have been substantially more had WHL not managed to get external out port dredging work. The loss projected

for 2017/2018 is in excess of \$1m and is simply not sustainable. It is important to note that the port is only a handler of bulk trade; we can't develop or produce that bulk trade ourselves. Without bulk trade there is no economic justification for a port.

Council agreed to 'hold' the dredge and the port operations for up to three years while all options for other opportunities for both the dredge and port were explored. Buller Holdings Limited (BHL) and WHL have worked incredibly hard to this end and have left no stone unturned. To date the following has been explored:

- Marketing of the dredge to every port and Council on the New Zealand coastline, information sent three times in past 24 months, including Mayor to Mayor by Garry Howard
- Continued discussion at Port CEO forum re availability of the dredge
- Bathurst/Coal trade MOU was being developed prior to coal collapse
- New Zealand Garnet MOU and pricing was being developed prior to garnet price drop, this is now uneconomic
- Discussions have also been held with Renew Energy Ltd (Waste to Energy) but this opportunity is not yet guaranteed, and if it was it is still at least three years into the future

Finding new business for the port has always been a core function and focus of the Harbourmasters role and if the next 'big thing' for the port was out there, it would have materialised by now. With any potential opportunities being three or more years away this does not justify the ratepayers funding the over \$1m loss per annum, or around \$140 per ratepayer per year. The other option would be to pass this cost on to the current users, which other than Talley's consist of only a small fishing fleet who would not want to see a more than tenfold increase in their share of port costs. This would make their businesses completely unsustainable.

The MV 'Kawatiri' Dredge

The Kawatiri has picked up some out dredging work, but not enough to justify holding this asset. There are no long term contracts confirmed. The main issue is also that this vessel is 39 years old and as it ages the maintenance costs go up substantially to the point that it is no longer economic and better to replace the asset with a new one if and when required. It is estimated that this will be the case within 3-5 years and in the meantime we would have missed the opportunity to get a reasonable sale price for the vessel.

Kawatiri is due to go on the slip for repairs and survey in September and this is the ideal time to reassess the market value and list the vessel for sale, and as it will be easily visible to any perspective buyer and will be in the best possible condition. There are indications that there may be interested parties. The cost of being on the slip is in excess of \$600,000 but without an up to date survey and the essential repairs and maintenance being carried out it can only be sold as scrap and will not sell for its true value.

The Proposed Action

In summary the direction we believe needs to be taken is as per the two points below:

- 1. This report recommends that the dredge be sold and that this process be contracted to BHL to manage on a commission basis. It should be listed for sale when it goes onto the slip in September.
- 2. The other recommendation is that Council direct BHL to move the operation of the port from Westport Harbour to WestReef, as on its own WHL is not a financially viable 'going concern' and is technically trading while insolvent. This should be done by December 2017 at the latest. The lease of both the land and pilot vessel 'Bob Gower' will also need to be transferred. It is important that as part of the process that WHL is retained as a dormant shell company so that we can utilise this structure in the future if required.

Then stage two of this process would be a review of all the remaining port functions, the structure and where this best sits. Questions that would need to be asked during the next part of the review include:

- a) Should the port management function come back to Council, or be transferred back to the Regional Council as per the Act?
- b) What land is required for the operation of the port? Should this be downsized and if still being operated by BHL what is the value of that land to determine the lease going forward?
- c) Do we still need to hold the 'Bob Gower' which currently has multipurpose harbour use including piloting, surveying and tug boat functions?

Realistically, we have until March at the latest to complete this review, as this will be a key determinant of direction for the LTP.

Considerations

1. Strategic Impact

This decision has considerable strategic impact. If we continue to allow WHL to run at a loss it will erode all the BHL reserves leaving no financial resilience and reducing income that could otherwise be offsetting rates. Continuing to run at a loss therefore has a direct and significant impact on our ratepayers who are already struggling with the financial downturn.

2. Significance Assessment

Because the closure of Holcim was signalled three years in advance Council took this into account in the 2015-2025 LTP, where the MV Kawatiri was no longer listed as a strategic asset requiring a special consultative procedure to sell. So while this could be considered a 'significant' decision, under our Significance Policy we do not have to consult on this decision.

3. Values Assessment

The Buller District Council values are: One Team, Community Driven, Future Focussed, Integrity and We Care, and this project aligns with these values.

We Care: About the impact of increased rates on our ratepayers - \$140 per ratepayer to cover the shortfall is not acceptable for an activity that delivers little direct benefit to the individuals paying for it.

Future Focussed: We need to think about the future implications of continuing to erode BHL's reserves as well as the future uses of the port, which has been well explored.

4. Risk Analysis

One of the main risks revolves around the ability of the harbour operation to trade as a going concern. There are penalties as a director under the Companies Act should a director allow a company to trade when there is no reasonable prospect of making a profit or if the company is technically insolvent. This risk is borne by the directors of BHL and ultimately the decision to wind up the company is theirs to make. This is because for the purposes of the Local Government Act 2002 (Act), Section 43(3) of the Act is clear that the Council cannot indemnify a director of a CCO for any liability arising from that director's acts or omissions in relation to the CCO. This would also apply to a director of the CCO that is a member of the Council.

This means Council cannot indemnify a director of WHL against liability for breaching their duties as a director under the Companies Act 1993, which may arise, for example, by allowing the business of the company to be carried on in a manner likely to create a substantial risk of serious loss to the company's creditors (reckless trading) or by agreeing to the company incurring an obligation where the director knows the company will be unable to perform the obligation when it is required to do so.

Furthermore, if the Council were to unlawfully indemnify the directors of a CCO and the Council suffered loss as a consequence, elected members of the Council could be personally liable for that loss under section 46 of the Act.

The related financial risk is that there are limited financial resources within the Holdings Group to absorb ongoing losses without impacting the resilience of the group. Council could be forced to subsidise the Group either directly or indirectly via rates.

Politically there are risks with this move because of how emotive this issue is for many people in our community; however there are equally (if not more) risks with doing nothing and letting the financial situation worsen.

As mentioned in views of those affected there are perceived risks around flood protection, however scientific evidence does not substantiate this.

5. Policy/Legal Considerations

<u>Companies Act</u> - As above continuing to operate WHL while technically trading insolvent is a breach of the Companies Act and puts the BHL directors at risk.

<u>Maritime Transport Act 1994</u> - This is the Act which is the key governing document for Maritime New Zealand.

Under this Act for the purpose of ensuring maritime safety in their regions, regional councils may regulate:

- (a) the ports, harbours, and waters in their regions; and
- (b) maritime-related activities in their regions

They also may appoint a harbourmaster, or delegate this to a port company provided they are a CCO. Note, this is not compulsory under the Act, but does become so if directed by the Minister. Under the Act the local authority can override any port company in regards to the hiring or firing of a harbourmaster.

It is also the role of Regional or Unitary authorities unless this is delegated or transferred to a District or City Council. This has obviously happened here at some stage in the past. The West Coast is quite unusual in this regard. Maritime New Zealand has developed a voluntary Marine Safety code for ports and harbours which is a set of standards that give effect to the Act. The Council have adopted this code for Westport Harbour and this is followed to ensure the safe operation of our port. This was created in 2004 and revised in 2016. Selling the dredge and no longer dredging does not affect our ability to comply with these standards.

6. Tangata Whenua

This is not considered to be of significance to lwi.

7. Views of those affected

We have received much feedback from the community on this issue, both through public forum, submissions and media. There have been concerns raised about the effects of not dredging on flood protection, but a recent report by LandRiverSea Consulting has dispelled this as largely an urban myth (see attached).

We have also had concerns raised about the impacts that closing the port and ceasing dredging may have on future industry opportunities for the district. As outlined already in this report this is not the case as we can reinstate the port and dredging at any time in the future should a new industry develop (see Costs/Financial implications below).

The last group of concerns relate to the safety of entering and exiting the harbour with the bar levels not maintained to the level they were when Holcim was using the port. Safety and risk can be managed through the plan and guidelines our current harbourmaster has in place, which complies with Maritime Safety Regulations. The bar is monitored daily and the guidelines updated as required. If the guidelines are followed along with maritime best practice for piloting vessels safely, there is no safety issue. However it will not be as convenient as it was before when entry and exit times were not restricted on the basis of tides.

The view of the board and Chief Executive of BHL is that WHL cannot continue to operate at a significant loss and that within 12 months all reserves and therefore any business resilience will be gone if this situation is allowed to continue. The directors are also very uncomfortable with their liabilities under the Companies Act. It is their view that the dredge should be sold rather than continuing to be held at a significant cost. They also wish to see a rationalisation of land and property, as currently the lease and rating costs are significant for a 'non-active' port.

Affected WHL staff have been kept informed on the potential downsizing of the port, and would need to be communicated with as soon as a decision is reached, and have received a copy of this report in advance.

8. Costs/Financial Implications

Based on updated budget predictions for 2017/2018, WHL estimates a loss of \$1.1m which includes some out port dredging income. The loss is not able to be internalised in the Holding Company in the future without decreasing the distribution to Council accordingly. This would equate to an increase in rates of around \$140 per annum per ratepayer to subsidise the cost of the running and dredging the port. Should the cost be passed on to the commercial vessels using the port, then this would equate to an approximate cost of \$7,900 per vessel. Clearly these options would be unpopular and unworkable.

The report outlines sale of the dredge. Sale of the dredge does not exclude the pursuit of business opportunities utilising the port in the future as Council could either lease or purchase a suitable vessel when required should an opportunity appear. There are suitable vessels available to do this work including - "New Era" ex-port Otago or the Albatross Hopper Suction Dredge which is owned by Netherlands based

company Dutch Dredging and already has long-term contracts around New Zealand. There is also the option to purchase a new dredge. This would either be Council, who would recover the costs through the port fees, or the industry themselves may find it more economic to purchase and own the dredge. A full business case would need to be done at the time to determine the best option.

A fairly quick sale would avoid loss in capital value from deterioration and fixed costs for the vessel if the vessel is parked up to wait for an opportunity that may or may not eventuate. From costs supplied fixed costs are likely to be in the vicinity of \$270,000 per annum to sit idle, not including the cost of deterioration.

9. Benefits

The benefit of making this decision now is that we reduce our losses going forward and avoid eroding the reserves of our Holding Company. This is of considerable benefit to ratepayers who will end up having to foot the bill. It is also beneficial to move all the operations under WestReef but not wind up WHL as this will give us the ability to utilise this structure in the future without having to pay all the costs involved with setting up a new entity. The costs of holding this as a shell will be minimal if not nil.

10. Media/Publicity

There will be a high level of interest in this decision as to many the port is a very emotive issue. Therefore we will be providing a clear and succinct fact sheet to the community to answer any 'FAQs' they might have prior to the meeting. A media release will be ready to go out as soon the decision is made. Affected staff need to be kept in the loop on the decision as soon as it is made. As per our media policy the spokespeople for this issue will be the Mayor and the Chief Executive.

Land River Sea Consulting Limited 5 Achilles Street, Burwood, Christchurch 8061 Tel: 03 967 0549 Mob: 027 318 9527 matthew@landriversea.com



17 OCTOBER 2016

The Mayor Garry Howard Buller District Council PO Box 21 Westport 7866

BULLER RIVER - MOUTH INVESTIGATIONS

As requested I have conducted investigations into the potential effects on flood levels due to:

- 1. Cessation of dredging operations at the Buller Mouth
- 2. Potential for rising bed levels due to the input of sediment into the river.

In order to better my understanding of the nature of the historic dredging operations, I have been in correspondence with Mike Graham, the Harbourmaster. I have viewed a number of soundings of the mouth as well as of the main channel. I have also analysed historic survey cross section survey data, this data was from from 1972, 1999, 2010 and 2014.

CESSATION OF DREDGING OPERATIONS

Dredging of the river has been carried out by the 'Kawatiri' for the past 37 years on an almost daily basis. Prior to this it is understood that dredging was also carried out on a fairly regular basis. It is understood that the primary purpose of the dredging was to maintain access up the channel for ships to transport coal and cement as well as other goods. The Coal berth and Silo Berths were maintained at a depth of 6m and the rest of the river was maintained at a depth of 4m below chart datum, although the SOI required 3.8m (Graham per comms, 2016).

It has been reported that the Bar usually forms 2 "spits". The first at 0.5cables and the second at 1.5 cables from the tip heads. The bars build from West to East, and can be up to 100m in width (Graham per comms, 2016). A cable is a nautical unit equivalent to approximately 600 feet or approximately 183 m. Soundings from 2005 however showed a significant bar forming at a distance of 1 cable.

In order to maintain access to the river channel the dredge would regularly remove material from the bar, it is thought that this has also been advantageous in helping minimise the flood risk to Westport.

Whilst a cable is not a typical unit of measurement when dealing with river models, I have continued to use this terminology for consistency with the information supplied by the Harbourmaster.

HYDRAULIC MODELLING OF THE BULLER MOUTH

Previous Modelling

A large amount of hydraulic modelling work has been carried out on the Buller River to date as part of the ongoing flood management investigations. This modelling has been carried out using the MIKE flood software package which is an internationally recognised, industry standard modelling suite for the modelling of rivers and floodplains. However, the modelling was carried out prior to the cessation of the dredging operations and had assumed that the mouth was clear of any obstruction (ie dredging at the mouth was in place). The main downstream control in the river was the tide level.

Current Modelling

The Buller River mouth is a complex, dynamically varying location, and any modelling of any such area involves simplifications. All modelling which has been carried out as part of these investigations has assumed that the bed levels are fixed. Due to this assumption it should be pointed out that the modelling will only give an indication as to the potential effects on flood levels due to the bar formations, however will likely be a worst case scenario due to the fact that during a significant flood, velocities would be sufficient to create scour, therefore removing or at the very least reducing the size of any significant obstructions at the mouth.

In order to more accurately model the mouth dynamics, the model has been converted to a purely 2-dimensional model and has been simulated within the MIKE 21 software suite. To allow reasonable simulation times, the model has also been reduced in size to only include the area downstream from the state highway bridge and has not included the Orowaiti River or Lagoon.

This updated model has not been calibrated to historic flood events and should not be relied upon for precise flood levels, however is considered appropriate for estimating differences in levels and flood extents between scenarios.

Modelled Scenarios

In order to get a feel for the potential effects of a build-up of a bar at the mouth I have set up a number of different scenarios, with varying locations and sizes of the bar formation. The flows have been set so that in the base scenario with no bar in place, the river is inundating the low lying land adjacent to the marina, however is not yet spilling into the surrounding properties.

I have based the height of the bar on the soundings from May 2005, however have also simulated situations with a larger bar formation than was shown as a sensitivity test. The soundings from May 2005 show the peak of the bar was at a depth of 1m below chart datum. For the purposes of these investigations, I have used this a base bar level and have also modelled bars with a peak level equal to chart datum as well as 1m above chart datum (ie 2m higher than the base scenario).

It should be pointed out that the size of the bars which have been simulated are purely hypothetical. The scenario with the bar at a level 1m above chart datum is considered unlikely to occur in reality and would be protruding significantly above the water level at periods of low tide. This has been included mainly for the purpose of testing the sensitivity of the model.

During a flood event, the size of the bar has an influence of the velocity of water flowing over the top of the bar. Due to the fact that the water flowing over the top of a large bar will be shallower, the velocities are naturally higher and the bar is more likely to be reduced in size due to scour.

The scenarios which have been modelled are as follows

- 1. No Bar at mouth
- 2. Bar to a depth of -1m (chart datum) located at a distance of 1 cable from the mouth
- 3. Bar to a depth of 0m (chart datum) located at a distance of 1 cable from the mouth
- 4. Bar to a depth of +1m (chart datum) located at a distance of 1 cable from the mouth
- 5. Bar to a depth of -1m (chart datum) located at a distance of 0.5 cable from the mouth
- 6. Bar to a depth of 0m (chart datum) located at a distance of 1 cable from the mouth
- 7. Bar to a depth of +1m (chart datum) located at a distance of 1 cable from the mouth



Figure 1 - Diagram showing cable locations.

The location and extent of the modelled bars is shown in Figure 2 and Figure 3.



Figure 2 – Modelled bar location at distance of 1 cable (~180 m) from mouth



Figure 3 - Modelled bar location at distance of 0.5 cable (~90 m) from mouth

All scenarios have been simulated so that the flood peak coincides with a high tide as well as a moderate storm surge. It is acknowledged that if the peak of the flood coincided with a lower tide level that the effect of the bar formation would likely be more significant, however during low tide periods, due to the wide tidal range of the Buller River, there is significantly more capacity in the lower reaches of the river and the increase in water levels will be of less consequence.

The effects of the cessation of the dredging at the Coal and Silo berths have not been simulated as it has been assumed that these areas will fill up rapidly as the bed mobilises during a flood event and have not been included in the original model for this reason.

MODEL RESULTS

BAR FORMATION AT A DISTANCE OF 1 CABLE FROM THE MOUTH.

The model results have demonstrated that water levels are unlikely to rise significantly due to the bar formation at this location.

Table 1 summarises the peak water level difference relative to the base scenario with no bar formation in place.

Table 1 – Summary of results for bar formation at a distance of 1 cable

Height of Bar	Peak water level difference (m)
1m below chart datum	0
0m chart datum	0
1m above chart datum	0.05m

BAR FORMATION AT A DISTANCE OF 0.5 CABLE FROM THE MOUTH

The model results have demonstrated that water levels are more sensitive to a bar forming at this location, however the size of the bar would need to be very substantial before any significant impacts to flood levels would be experienced. It should be highlighted once again that a bar level of 1m above chart datum is a purely hypothetical scenario. The bar would be 2m higher than that surveyed in 2005 and would be protruding significantly from the water level during periods of low tide.

Table 2 – Summary of results for bar formation at a distance of 0.5 cable

Height of Bar	Peak water level difference (m)
1m below chart datum	0
0m chart datum	0.15-0.2
1m above chart datum	0.4-0.5m

Figure 4, Figure 5 and Figure 6 present the modelled flood extents for the scenarios detailed above.



Figure 4 - Model Results - No Bar



Figure 5 - Model Results – Bar to a depth of 0m (chart datum) located at a distance of 0.5 cable from the mouth



Figure 6 - Bar to a depth of 1m above chart datum located at a distance of 0.5 cable from the mouth

CONCLUSIONS

The following can be concluded from the modelled results:

- The formation of a bar at the Buller River mouth is unlikely to have a significant impact on flood levels
 unless the bar was significantly higher than has been recorded historically.
- Model results have shown an increase in flood levels of 0.4-0.5m if the bar was 2m higher than that recorded in 2005.
- Model results have shown that the bar would need to form within a distance of 0.5 cables of the river
 mouth in order to have a significant impact on flood levels. (Soundings from 2005 showed a significant
 bar forming at 1 cable from the mouth.)
- If a large bar was to form, velocities are such that it would likely scour out in a flood event that is large
 enough to cause surface flooding within Westport.

RECOMMENDATIONS

I would recommend continuing monitoring of the river mouth, particularly if a significant bar is beginning to form to get a more detailed understanding of how the bar will form and grow now that dredging has ceased. Detailed soundings can be used in order to assist with future modelling. If possible, it would be ideal if the surveyed area was expanded and continued up the river to the State Highway bridge to also gather data on how / if the river bed changes upstream from the mouth with the cessation of the dredging.

INCREASE IN BED LEVELS DUE TO INCRESE IN SEDIMENT INFLUX

The West Coast Regional Council conducts regular surveys of the Buller River at a set of fixed cross section locations. I have examined bed levels over a range of survey periods from 1999 and cannot pick up any trends of aggradation due to an increase in sediment influx. The only area which appears to have experienced an increase in bed levels (a decrease in channel capacity) is at Organs Island, and this is likely to be due to the constrictions in the channel helping to trap sediment coming from the upper catchment. Continued gravel extraction in this area would be prudent. If the channel capacity at Organs Island is significantly reduced then more water will be forced to flow down the Orowaiti overflow, increasing the flood risk to the downstream residents. It is difficult to precisely quantify the increase in flood risk, as increased velocities in the river will cause much of the restriction to scour away during a significant event, however the time required to do this will depend on the volume of material which has built up in this area.

Survey appears to show that the bed levels in the Buller River are fairly stable and are likely to have found a natural equilibrium. I consider it unlikely that the bed levels will rapidly change even if there is a temporary increase to the volume of sediment entering the system. Whilst short term localised increases may occur, it is likely that during a significant fresh in the river, the bed will be mobilised and the bed levels will readjust to their

natural 'preferred' slope. This is unlikely to significantly change unless the sea level was to rise significantly or there was a major change to the typical flow regimes.

If bed levels were to increase in the long term, then this is likely to reduce the flood capacity of the channel and increase the flood risk to Westport. This should be evident in the regional council cross sectional survey, which is likely to be next scheduled in 2018 (assuming it is carried out every 4 years). If there is local concern that bed levels have risen more rapidly since the last survey in 2014, then a partial survey may wish to be considered in the areas of concern. If significant aggradation was observed in the partial survey, then a full resurvey may be justified.

I have attached plots of the surveyed cross sections for the years 1999, 2010 and 2014 at the end of this document for your reference.

Please don't hesitate to get in touch if you have any questions or require clarification around the contents of this memo.

Kind regards,

Matthew Gardner

M Brocke

Director, Land River Sea Consulting Ltd

CPEng, MIPENZ











































