

## Minutes of the Kopeopeo Canal Remediation Project Community Liaison Group meeting held at Eastbay REAP - Putauaki Room, on 21 November 2017 commencing at 10:00am

**Chair:** John Pullar

**Scribe:** Hazel Ryan (BOPRC)

**Members present:** Eula Toko (Cultural Monitor), Andrew Kohlrusch (Independent Monitor), Tani Wharewera (CS3 and Hokowhitu Marae representative), Hayden Power (Federated Farmers), Rene de Jong (Whakatāne Harbour Care Group), Tui Edwards (CS2 representative), Clint Savage (DOC), Scottie McLeod (Whakatāne-Tauranga Rivers Scheme), Neal Yeates as proxy for Amanda Austrin (CS1 representative), Gary Searle as proxy for Shane McGhie (WDC)

**Others present:** Brendon Love, Abby Tozer, Ken Tarboton (BOPRC), Matt James (Independent Monitor Field Observer), Tracey Godfery (Te Wānanga o Awanuiārangī), Des McCleary (EnviroWaste), Dr Joanne Kelly (University of Waikato), Emma Joss (BOPRC Consent Authority), Mark Reider (Media), Melba Dawson, Darryl Dawson, Marlene Kranz, Doug Wright

**Apologies:** Bruce Crabbe (BOPRC), Shane McGhie (WDC), Amanda Austrin (CS1 representative)

### Action summary

No.	Actions of 21 November 2017	Responsible	Status
1	-	-	-

### Item 1: Welcome and karakia

- i. Clint Savage said the opening *karakia*. The Chair welcomed all those present and thanked them for attending.

### Item 2: Apologies

Apologies were received for Bruce Crabbe, Shane McGhie and Amanda Austrin.

<b>Motion: Apologies approved</b>	<b>Kohlrusch/ McLeod</b>	<b>CARRIED</b>
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### Item 3: Minutes of previous meeting

#### a) Matters arising:

- i. No matters noted.

No.	Actions of 20 June 2017	Responsible	Status
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**Motion: That the minutes of the Community Liaison Group meeting of 20 June 2017 be accepted as a true and correct record.**

**Wharewera/Power**

**CARRIED**

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#### **Item 4: Communications**

During the presentation given by Abby Tozer (Slides 3-5), the following points were commented on:

- i. Abby reassured those present that although there was a long period without Community Liaison Group meetings over winter, communications were maintained over this period albeit in a more targeted manner such as emails to residents affected by peripheral works and flood management information sessions for specific properties.
- ii. It was noted that email updates sent out by the Deputy Project Manager to CLG members were well received and timely.
- iii. It was acknowledged that although recent communications regarding Kope Drain Road closures were compliant with the Traffic Management Plan (TMP), the Project Team would endeavour to use additional methods of communication to ensure broader notifications were received in future.
- iv. All CLG members had been given the opportunity to review the Community Engagement Plan (Communications Plan) and in the absence of further comments the plan was being treated as approved.

Questions and comments that were raised during the presentation:

- a. Neal Yeates commented that letter drops were more effective than emails for his neighbours on Kope Drain Road.
- b. Tui Edwards suggested the use of a noticeboard to display newsletters and other project publications outside Containment Site 1 provided it does not breach NZTA requirements or obstruct traffic visibility and parking.

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#### **Item 5: Project Update**

During the presentation given by Brendon Love and Ken Tarboton (Slides 6-33), the following points were commented on:

- i. Ken advised that for the purposes of the physical works contract, he has now been appointed as the Engineer's Representative on site.
- ii. Ken reminded those present that main project works were suspended between mid-July and mid-October because of the heavy weather events. He reported on the peripheral works carried out over winter and stated that CS1 works are now very near completion thanks to the work of the contractors.
- iii. Ken noted that the dredge head shown on slide 14 was custom-designed and manufactured for the project with a spare head on hand in the event the first

becomes unusable. The barge was lifted into the canal in early November as shown on slides 15-17.

- iv. Brendon pointed out the confluence access track being established to install one of the control structures at the Kopeopeo-Orini confluence. He added that the new methodology eliminated the need to build a longer road along the canal to accommodate truck movements and that the Project Team would look at a plan to enhance the surrounding area following project completion.
- v. Brendon noted that the original sheetpile design had been replaced with an earthen bund design which would mitigate some health and safety risks. The control structure was designed to eliminate flow except in specific circumstances when the dredge would be shut down, and turbidity data and water level data used to determine if water could be released without environmental effects. He added that further detail on control structures is documented in the Dredge Management Plan which was currently under peer review and soon to be published online.
- vi. Brendon clarified that water naturally flows from west to east, but the Flood Management Plan allows for water to flow east to west and peripheral works have been completed to accommodate this flow. The compliance point is near the control structure at the Orini-Kopeopeo confluence and discharge is strictly controlled with telemetry points and turbidity meters which provide real-time data as a proxy for dioxin sampling which has a longer turnaround time.
- vii. Upcoming activities over the next two months include completing bulk earthworks, carrying out truxor dredging, installing control structures, installing additional culverts in Kope West Canal, eel removal, euthanizing eel and baseline data collection of eel tissue, and main dredging is likely to commence in mid-January.
- viii. Brendon gave some background on geotechnical issues discovered in September 2016 highlighting issues with lateral spread which has been mitigated by setback incorporated into design. The report also identified differential settlement issues for which three options were explored: wood waste removal, ground improvement using piles, and foundation material thickness increases. Due to limited on-site storage space, the removal, stockpiling and handling of the wood waste was considered to generate additional risks. Piles were not cost effective, therefore further analysis of increasing the foundation material thickness was being undertaken. While this option would increase traffic movements during construction, it would result in fewer safety risks to manage.
- ix. Brendon drew attention to a review of CS3 design criteria which has been based on hazardous containment where any release of the hazardous substance can result in immediate risk of injury or death. Given the level of contaminants within the containment site were on average likely to be below the National Environmental Standard and not pose any immediate health risks, the current criteria were seen as conservative. Further analysis of the

risk of altering the design criteria was being undertaken and the resulting report may be used to support an upcoming application for a CS3 design criteria variation. The report would be reviewed by the Independent Monitor and any change would be implemented alongside a comprehensive monitoring programme. If implemented, there are benefits associated with the design criteria change, which include fewer truck movements for foundation material and a shorter construction duration, which means less disruption to the community.

- x. There is recognition of the need to utilise the summer construction period to avoid delays experienced during winter 2017 and as a result CS3 detailed design based on existing criteria is underway in the event that alternative design criteria is not applied for or approved.
- xi. To keep the public safe, vehicle access to CS3 will be restricted from 8 January 2018, with a pedestrian access point provided. This will be communicated in public notices in advance of closure.

Questions and comments that were raised during the presentation:

- a. Neal Yeates asked if there was a density meter measuring sediment when dredging takes place? Ken answered that a geospatial model is used to measure the depth of cut, with a 3D survey for final volume estimates, to be matched as dredging progresses.
- b. Roger Houghton asked how deep the dredge penetrates down. Ken responded that the dredge head has skids on the side which go through soft sediment without pushing down on clay. Brendon added that it stops when it reaches the firm marine sediment in the base of the canal.
- c. John Pullar asked how long it takes for suspended sediment to resettle. Brendon responded that the dredge trial indicated that turbidity levels drop to background level six hours after dredge shut down.
- d. Roger asked if flow in the canal stops when the structure is built. Brendon responded that the coffer dam upgradient would stop the flow.
- e. Tani Wharewera asked about the schedule for pipeline connection and dredging. Brendon responded that pressure testing would take place on 8 January 2018 and dredging would commence on 15 January 2018. The open day would then be scheduled for a weekend in February/March 2018 without the need to suspend normal operations.
- f. John asked where the material would go once dredged. Brendon made a brief comparison of the old and new methodology and explained that the dredge head sucks up sediment and water and transfers it to the treatment plant at the containment site where flocculent is added before it is pumped into the geobags in the HDPE liner. The flocculent binds the fines particles, which the contaminant is bound to, to make them denser and unable to pass through the filter cloth that the geobags are made from. The bags then allow the separated water out and it is pumped back into the canal.
- g. Darryl Dawson asked how tree stumps in the canal would be managed. Brendon responded that the Dredge Management Plan (DMP) would be

followed and that debris would be removed as practical. Darryl asked if the Patuwai Rd drain [Wrights Drain] would be blocked off with a dam. Brendon responded that there will be a floodgate on that end of the canal and that all adjoining floodgates would have an additional seal, but the Wrights Drain pump would still operate to provide flood relief to the adjoining catchment. Ken added that catchments gravity feed into Kope Canal but also get pumped out at the Fortunes Road drain using two additional submersible pumps as in the case of Kapua Drain.

- h. Roger asked if other flap gates also drain into the Kopeopeo Canal. Ken replied that a backflow control blanket will be used to prevent backflow. Brendon added that all these flood mitigation measures would be checked on an ongoing basis.
- i. Tani asked how those transporting the deceased to the *urupa* in waka would gain access to the river without access through CS3. Brendon stated that the team would coordinate access with the Opihi Whanaungakore trustees and Department of Conservation but emphasised that the restrictions are short term until heavy traffic eases. Neal suggested the possibility of alternative access through the kiwifruit orchard and Brendon said that this option would be considered.
- j. Darryl asked what would become of the eels in the Patuwai Rd drain [Wrights Drain]. Brendon responded that those eels were not likely to be as contaminated as those in the Kopeopeo Canal and that although there would be no active fishing in that drain, baited nets would be used in side drains. He added that side drains just off Kopeopeo Canal have been sampled and that data is at background level as shown on the GIS page on the website.. Darryl asked further whether the Toroa marae site had been sampled. Brendon responded that the results of sampling carried out there showed concentrations below the project remediation target and well below the National Environmental Standard.

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### **Item 7: Independent Monitor**

During the presentation by Andrew Kohlrusch and Matt James, the following points were commented on:

- i. Andrew stated that he had been in the role of Independent Monitor for the project since 2015 and was involved when the new methodology was being considered. He stated that the outcomes and learnings from the Kopeopeo Canal Remediation Project would provide a huge research opportunity for bioremediation that could be used in comparable projects around the world.
- ii. He commented on CS3, stating that the key to success was to ensure a long-term management strategy, a clear chain of command and adherence to the relevant technical and communications plans. He noted that there is a lot of redundancy built into the management plans as a contingency, and that the likelihood of significant risks arising remained low.

- iii. Matt presented his role on the project as the Independent Monitor Field Observer which involves being on site several times a week. He noted his observation of strong health and safety processes during peripheral activities such as tree removal. Matt will also observe the eel removal together with the Cultural Monitor.
- iv. He noted dust exceedances were the main issue to overcome and that this was currently being mitigated through the use of water carts.
- v. Matt agreed with comments earlier in the meeting about road closure communications requiring additional action.
- vi. Matt reiterated that the Independent Monitor role is to respond to and raise issues and welcomed any comments.
- vii. Andrew added that the Project Team and Contractor are mindful of potential implications of non-compliance [of consent conditions] and have set triggers to receive alerts before targets are reached to enable action. Matt noted that he observed works being stopped while water carts were being re-filled, demonstrating that compliance with conditions is prioritised even at the risk of losing some construction time.

Questions and comments that were raised during the presentation:

- a) Neal asked where water was sourced from for the water carts used to mitigate site dust. Des McCleary responded that the water is sourced from Mill Road and from the site.
- b) Neal Yeates asked about dust contamination and Brendon responded that Kope Drain Road and the stop banks had been sampled with only background results reported, and that baseline air quality monitoring undertaken the previous summer did not report elevated dioxins with the exception of one event that was attributed to forest fires ash. Furthermore he commented that soil quality at CS1 undertaken before the works reported background concentrations.

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### **Item 8: Health, Safety and Monitoring**

During the presentation by Des McCleary, the following points were commented on:

- i. Des noted that there had been no more issues with stormwater management on site because the period since works restarted had been very dry.
- ii. Des provided a visual representation of water samples of discharge off site, processed through the silt buster. He advised that the trigger level had been set at 30% below the consent condition, enabling faster responsiveness.
- iii. He stated that there had been no medical incidents, no loss time, and no first aid incidents on site since the restart although a truck and trailer had a slow-speed collision because they did not observe the exclusion distances. He added that correct communication and planning enables work to be carried out safely.

- iv. He offered apologies for the recent shortfall in traffic management communications and expected this would be improved for upcoming disruptions along Kope Drain Rd.
- v. Des advised that wheel washing and a road sweeper was used to avoid dirt tracking onto the road.
- vi. In accordance with the TMP, a 80km restriction is in place along SH30 and Kope Drain Rd. Des added that occasionally larger trucks have to use Kope Drain Rd but those drivers are made aware of other road users. Measures taken to increase safety of SH30 include earlier signage warning of lower speed limits, coordination with local police to encourage enforcement of speed limits, radio announcements and vegetation removal to increase sightlines. In planning ahead for CS3 works, a limit of 50km has been proposed on Keepa Rd.
- vii. Over 120 inductions have now taken place with all subcontractors being inducted, Job Safety Analysis completed and environmental impacts considered.

Questions and comments that were raised during the presentation:

- a) Roger Houghton asked about the PH of the water discharging from the containment site. Des responded that the PH of this water is 7.
- b) Neal Yeates asked if the same polymer used in the siltbuster would be used for the sediment. Des responded that a different flocculent will be used.
- c) Scottie McLeod congratulated Des and his on-site team on their strong health and safety record.

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**Item 9: Other business and date of next meeting**

- i. No other business noted.

**Next meeting:** Placeholder for Tuesday 23<sup>rd</sup> January 2018

**Meeting closed at 12.30pm**