

Minutes of the Kopeopeo Canal Remediation Project Community Liaison Group meeting held at Eastbay REAP - Putauaki Room on 29 May 2018 commencing at 10:00am

Chair: John Pullar

Scribe: Hazel Ryan (BOPRC)

Members present: Rene de Jong (Whakatāne Harbour Care Group), Tui Edwards (CS2 representative), Matt James (Independent Monitor Field Observer), Andrew Kohlrusch (Independent Monitor), Neal Yeates as proxy for Amanda Austrin, Cameron Huxley (Toi Te Ora Public Health), Kathryn Barclay (Toi Te Ora Public Health), Tani Wharewera (CS3 and Hokowhitu Marae representative), Hayden Power (Federated Farmers),

Others present: Abby Tozer, Brendon Love, Ken Tarboton, Bruce Crabbe (BOPRC), Robbie Martin, Margi Martin, Emma Joss, Jean McCauley, Guy Barlass, Des McCleary, Sharna McCleary, Andy Galbraith, Karam de Lacey

Apologies: Amanda Austrin (CS1 representative), Shane McGhie (WDC), Clint Savage (DOC)

Absent: Eula Toko (Cultural Monitor), Scottie McLeod (Whakatāne-Tauranga Rivers Scheme)

Early departure: Neal Yeates (12.30)

Action summary

No.	Actions of 29 May 2018	Responsible	Status
1	Attend the stopbank disturbance near Shaw Road/Gateway and inspect disturbance. Report back to CLG via email.	Brendon Love, Ken Tarboton and Matt James	<i>Completed</i>

Item 1: Welcome and karakia

- i. Tani Wharewera said the opening *karakia*. The Chair welcomed those present and thanked them for attending. He also noted that it was the Project Coordinator's last CLG meeting before taking up a new position at Council.

Item 2: Apologies

Apologies were received for Amanda Austrin, Shane McGhie and Clint Savage.

Motion: Apologies approved	De Jong/Yeates	CARRIED
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Item 3: Minutes of previous meeting

a) Matters arising:

- i. No matters arising.

No.	Actions of 24 April 2018	Responsible	Status
1	-	-	-

Motion: That the minutes of the Community Liaison Group meeting of 24 April 2018 be accepted as a true and correct record.

Love/De Jong

CARRIED

Item 4: Communications

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

- i. Abby informed those present that Andy Galbraith from Bullseye Productions had been invited to the meeting that day to capture some photos and video footage as part of project documentation for posterity.
- ii. The Community Open day has been announced and will take place on 16 June 2018 from 10am-12.30pm. RSVPs are not necessary, and the project flyer has been sent by email and is shared on the website. Hard copies are also available on request.
- iii. She noted the recent publication of an article in the Beacon on flooding experienced at the Julians Berry Farm on Huna Road and this article would be discussed in the flood management section of the meeting.
- iv. Abby reiterated that the [Project page](#) is the main source of project information and encouraged those interested to sign up to receive alerts when new information is published.
- v. She noted that the information panels on the project had been completed and some were already erected at key project locations. The objective of the boards is for pedestrians passing by to gain a basic understanding of what the Project involves and also to inform them of the project website for further information.

Questions and comments that were raised during the presentation:

- a) Guy Barlass noted that any posters erected in the public space were liable to be vandalised. He recommended getting in touch with the local 'Tag Off' organisation if the signs are defaced with graffiti.

Item 5: Tech Talk

During the presentation given by Karam de Lacey (slides 6-18), the following points were commented on:

- i. ControlTech Ltd. provides telemetry services for Rivers and Drainage, specifically for monitoring of water levels at pump stations and has been engaged for the Kopeopeo Canal Remediation Project to monitor water levels, turbidity and dust for flood management and compliance purposes.

- ii. There are multiple sensors for monitoring turbidity along the canal, and air monitoring is undertaken at Containment Sites during construction. Turbidity is essentially a measure of how cloudy water is and is measured in NTUs (Nephelometric Turbidity Units). As a comparison, drinking water is 1 NTU.
- iii. Data is gathered in real time rather than 10-15 min uploads and solar energy is used to power the devices, with batteries for night time use. Trigger points are configured in the system for consent purposes so a text message alert is received when the system registers values above a certain trigger level but below a consent limit, providing sufficient time to identify the issue and get to site to rectify the problem, thereby preventing non-compliances.
- iv. Karam pointed out the mobile trailer monitor established for the project, which contains an onboard computer so that data is safe even if it drops off the network temporarily. Data is also sent regularly to the cloud and stored indefinitely.
- v. He described the transducer which is linked to staff gauges for water level monitoring and calibrated weekly using a formula made in the BOPRC lab because as instruments age, readings can be affected.
- vi. The pontoon turbidity monitor is located at the Orini-Kopeopeo confluence which is outside the project area to provide background (control) monitoring. Turbidity is measured in real time, but 5-minute and 10-minute averages are also available.
- vii. Karam noted that the ControlTech crew receive an alert whenever there is a heavy rain warning, so they can diagnose issues remotely and save time on the ground. Flood pumps can also be switched on and off in real time, enabling greater responsiveness in a weather event. He added that the shutdown of flood gates is staggered to avoid a wave effect in the canal which would push up the levels and cause the pump to reactivate and it also helps with weed control.

Questions and comments that were raised during the presentation:

- i. Brendon noted that monitoring results needed to be considered in the context of project activities.
- ii. Tani asked if the dioxin sampling was included in monitoring by ControlTech. Brendon responded that only nuisance dust is monitored by ControlTech and that dioxin sampling would be covered in the Independent Monitor section of the presentation. He explained that since dioxin analysis is time-consuming, turbidity is used as a proxy measurement in real time but that since not all turbidity is contamination-related, it's merely a guide to help inform project decisions.
 - a) Tani asked if the flood gates were open at present. Brendon replied that since the site is not currently in a flood event, the gates are closed. Hayden asked at what level the flood gates were opened. Ken responded that the levels guiding opening and closing are defined by the consent conditions. He stated further that they were opened yesterday and closed when the water in the canal levelled out to 0.2m RL.

- b) John asked if there is a long-term monitoring regime in place once the project ends. Brendon responded that once the project ends and the FCSs are removed after the completion of dredging, the primary focus for monitoring is the quality of any discharges from containment sites back into the canal.
- c) Robbie asked about the relationship between dioxin and turbidity. Brendon responded that the dioxin proxy gives an indication of picograms per gram (pg/g) at certain turbidity (NTU) levels. Robbie asked what the upper level is. Brendon answered that he would need to check the trial report but that from memory the highest reading found during the 2015 dredge trial was around 130 NTU, and the dioxin concentration was around 32 pg/g.
- d) Robbie raised a concern about a leaking floodgate causing water from the canal to backflow into the drainage system. He clarified that he was not concerned about dioxins at that height of the canal, but did note a high level of mastitis in his herd following flooding of his paddocks and attributed this to the artificially elevated levels of water in the canal putting pressure on culverts. The Chairman asked for the discussion to be continued in the flood management section.

Item 7: Project Update

During the presentation given by Brendon Love and Ken Tarboton (slides 19-35), the following points were commented on:

- i. The weather event which took place on 15 May was described, with 100mm of rain received by 6am, causing flooding on adjacent properties and additional Sykes and submersible pumps needing to be deployed to assist gravity drainage of flood waters. Tractor pumps were used at Reids Central Canal, but pumping in lower catchments is subject to water release at Matahina Dam.
- ii. It was acknowledged that the canal water to the west of the project area is remaining at elevated levels for longer periods than it would be without the FCS in place. When water rose above 1m RL, the flood gate was opened to provide relief.
- iii. The article in the Beacon about flooding at the Julians' Berry Farm (JBF) was discussed. The Project Team had observed drainage in the morning of the rainfall event at JBF and recommended the owners dig trenches to provide drainage off their land into the roadside drain.
- iv. A general update on the project was given, with Brendon noting that with the change in Containment Site selection late in 2016, there is now more capacity at CS1 than anticipated so sediment would be transferred into CS3 before CS1 reaches capacity. The Water Treatment Plant will be moved to CS3 in the second half of July.
- v. The recent Paroa Road barge lift was successfully completed with a partial road closure which lasted only 4 hours and caused minor disruption to road users.

- vi. A project milestone was recently reached with the completion of CS3 main civil works and a celebratory BBQ was provided for the workers.
- vii. It was noted that an operator engaged for weed removal from the canal had inadvertently caused disturbance to the stopbank on the southern bank of the canal near the discharge point. The disturbance resulted from an operator's efforts to cut a track to provide a safer, more stable working platform along the canal bank. It was emphasised that all operators inducted onto the project are routinely made aware of contamination risk in the stopbank from previous dredging and the CSMP for minor disturbances followed, however the operator in question had replaced the original operator and may not have been aware of the risk.

Questions and comments that were raised during the presentation:

- e) John noted that the flooding experienced in mid-May was surface flooding and asked whether it due to inadequate drainage. Bruce Crabbe explained that the ground was already saturated from earlier rain events, reducing ground infiltration. He said the rain that fell was equivalent to a five-year event and that most flat lying land in the district has provision for a five-year event, allowing three days for dispersal of water to prevent pasture damage although berry fruits are generally less tolerant.
- f) Tui noted that a neighbouring subdivision was experiencing issues with drainage due to the canal being blocked and asked that the project be completed as soon as possible.
- g) Guy asked about dioxin levels in the Marshall/Kapua culvert off Shaw Road. Ken replied that the catchment area will eventually be released and that Marshall Drain has been put through a culvert and comes out to the east of Shaw road. He added that a further culvert will be installed once the dredge has passed that area.
- h) Brendon admitted that the Flood Management Plan had been reviewed in light of recent events and there was acknowledgement that it is not working as anticipated. Additional flood mitigation actions undertaken included clearing drains, putting culverts in place, dropping water levels in advance of rain warnings, etc. He stated that the Project Team is committed to continue working with the Martin Family to assist with flooding and drainage issues. Robbie stated he had concerns that flooding will cause dioxins to spread further. Bruce clarified an earlier misunderstanding and acknowledged that the floodgate on their land is BOPRC responsibility. Matt stated that at the time of the flooding issues, photographs were taken and actions were put in place to resolve the issues effectively.
- i) Guy referred to UK scientific studies which document the correlation between flood events and elevated dioxin levels in dairy cows from grazing on contaminated soil. Robbie recommended looking beyond the numbers in determining safe contamination levels. John responded that the numbers are necessary, because they enable evidence-based decision-making. Tui recalled Joe Harawira and his aspirational plea to aim for total removal of

contamination even if it is not possible. Guy stated that exposure to contaminants is cumulative so for some people with previous exposure history, there is no safe level of exposure even if the medical experts promote those safe levels as a guide for the general population. He acknowledged that removing contamination from the canal is a big step forward. Andrew noted that most exposure thresholds are based on background exposure combined with an added exposure for a particular industry or waste product with an assumption for a certain level of intake in normal, urban environments, and an additional level calculated. Brendon stated that the exposure pathways associated with dioxins in New Zealand was minimal when compared to other countries but acknowledged that the Whakatāne District probably has a higher potential for exposure than the national average due to the various dioxin sinks; such as the canal, stopbanks and woodwaste sites associated with the former sawmill. He added that due to the way those sites were managed and used the highest human health risk is likely to be associated with consumption of contaminated eel.

- j) Andrew noted the clear benefits of having a community forum in place for the project, including the opportunity for members of the public to ask questions and also for the CLG to be the eyes and ears of the community. He commended the way the Project Team responds to queries as quickly and effectively as possible to allay fears. He contrasted this experience with cases he had witnessed in the USA where there is very little opportunity for this type of interaction and clean-up often occurring in isolation from the local community. Robbie responded to Andrew's comments saying that he feels this perspective is at odds with the hearing process. Brendon asked Robbie to leave the hearing in the past and note that the project turned a corner when the new dredging methodology was developed. Robbie responded that he is not entirely convinced, but would like to acknowledge the efforts made by the team.
- k) Guy suggested that the current project is focused on drainage and removing contaminated sediment, but not stopbanks and that if the community wished for further remediation of contaminated land such as that in the stopbanks, they should direct energy to lobbying the central government to undertake epidemiological studies.

Item 8: Independent Monitor

During the presentation by Matt James (slides 36-43), the following points were commented on:

- i. The IM report for April is now available on the project website.
- ii. He clarified that the Independent Monitor role is not to report on compliance, but that he hopes to give visibility on conditions.
- iii. He pointed out that the recent validation sampling results were very low especially when considering that 20 is equivalent to 0. He explained that the objective of the remediation is to attain a 95% Upper

- Confidence Limit (UCL) that the samples are less than 60 pg/g on average, although there can be some higher results.
- iv. Matt discussed the various monitoring results all contained in the April report including samples taken from the HDPE liner, bulk bags, canal weed and air monitoring which were all below limits.
 - v. He commended the prompt response to issues arising on site, and described how recently one of the geobags was found to have a hole, and once identified, dredging stopped immediately.

Questions and comments that were raised during the presentation:

- a) Robbie noted Ron McDowall's opinion that all containment sites leak, so there is potential for contaminants to leak into groundwater. Matt responded that there is bi-monthly monitoring of groundwater wells so there are many layers of protection and redundancy built into the process.
- b) Robbie asked about the sampling carried out on the weed. Brendon clarified that the weed tendrils were selected for analysis because of the presence of residual sediment.

Item 9: Cultural update

During the presentation (slides 44), the Project Team commented on the following points:

- i. The contribution of Joe Harawira was recognised at a recent EPA conference.
- ii. Tani noted growing awareness of remediation issues at national and international level.
- iii. Tui said that Ken gave a thorough and interesting presentation.
- iv. Ken also noted that Brendon presented on the project at the Australasian Land and Groundwater Association conference in early May and that there is strong national interest in its progress and methodology.

Item 10: Health, Safety and Monitoring

During the presentation by Des McCleary (slides 45-46), the following points were commented on:

- i. Worker wellbeing is taken very seriously and fatigue is a real issue which is being actively managed, which is why work was shut down on 25/05 so the workers could have a weekend to rest. It was raised by the Independent Monitor Field Observer as a safety issue and the advice was taken on board and operators informed of weekend shutdown, with the decision being supported by company management too.
- ii. Des described the containment system which prevents filtration of any material from the cell from the filtrate sump and that by keeping the cell wet, airborne material is prevented.

- iii. When the barge is relocated over SH30 a road shoulder closure will be used but there will be no road shut-down because the barge will have all equipment removed and taken to Kope Canal Road where it will be offloaded.
- iv. He noted a query on the previous barge lift from the Principal of Paroa School who felt that there was insufficient notification of the road closure. Des addressed this feedback with the school and explained that the road closure was rescheduled from earlier in the week and authorisation for the rescheduled time was only received late on Thursday, which is why short notice was provided to affected parties.

Item 11: Other business and date of next meeting

Next meeting: Placeholder for Tuesday 10th July 2018

Meeting closed at 1.30pm