

Minutes: Hikurangi Flood Management Scheme Working Group Meeting held at WDC Walton Plaza Level 2 – Pohutukawa Room and by Zoom @ 10.30am

Facilitator	Simon Charles
Scribe	Trisha Ryan
Purpose	Forum to discuss the Hikurangi Flood Management Scheme Issues
Present	Simon Charles, Trisha Ryan, Hai Nguyen, (all WDC) Evan Smeath, Simon Donnelly, Phil Hindrup, Barry Thorne, Geoff Crawford, Stephen Brown, Ken Finlayson, (all Pocket Reps), Emily Stringer (NRC), Anh Nguyen (DOC), Chantez Connor, (NRC/NKONWM) Jess Wallace (eWater - via zoom), Cory Hutchinson (Hydrotech), Ben Marsh (Golden Bay)
Apologies	Justine Rowe, Greg Palmer, Stephen Brown, Andrew Carvell

Simon Charles addressed the floor, opened the meeting welcoming members and staff representatives from the Whangarei District Council.

Item	Description	Action	Decision
Apologies	As Above		
Actions	Actions Discussed in table below		
Financial	Points noted <ul style="list-style-type: none"> Discrepancy between the Pump electricity cost – Discount for early payment Power Company Invoice \$253587.80, WDC Balance sheet \$215610.14 paid Discount \$36063.28 Due to the report provided runs for the calendar month. While the invoices crosses months i.e., 7th to the 7th to the following month, resulting in small variance of \$1914.38 	Simon sent out an email regarding topic on 20 January 2022	
Operations Update	Hikurangi Swamp Scheme Ownership <ul style="list-style-type: none"> A number of meetings have been held through out 2021 to discuss the ownership and governance of the scheme Various structures proposed and but forward. Andrew Carvell has done a lot of work on this Discussions around placing the Ownership of the Scheme into a Managed Trust – put forward to Simon Weston (example used Tutukaka Marina) Is the scheme owned on behalf of the farmers and administrated by the WDC? NRC oversees, WDC Manages, Farmers Own the scheme WDC to search archives for documentation of ownership Timeline - to be sorted by next meeting 26th May 2022 and before 3 Waters comes into effect 1st July 2024 	This needs to be clarified Simon	Ownership issues to be resolved before moving forward

	<p>Helicopter Spray Update</p> <ul style="list-style-type: none"> - WDC carried out inspection on 12 January 2022 and Hydrotech followed up with photos and updates - Geoff advised that spraying was Poor - Average - Only one side of some drains sprayed – Helicopter sprayed. Corey from Hydrotech has addressed this issue with the Helicopter pilot - Spraying has been random – to be raised with Hydrotech - Survey on the state of drains needs to be done as soon as possible - Evan Smeath suggested that hydrotech does this by way of a drone and report back with photos - Weed control at Pump Stations oxbows important as weed can sit over grates during a weather event. Not checked at present - What is the state of the drains at present? Sprayed awhile ago and coming up to the rainy season <p>Mechanical Drain Cleaning</p> <ul style="list-style-type: none"> • WhatsApp group was setup on 20th December 2021 including WDC, NRC, Hapu, Hydrotech contractor Location of drain cleaning & Time to start Mention of Chantez leaving the WhatsApp group re – 8 hours stand down period • Exclusion zone of 100 metres. Chantez shall use some tools such as road cones or something similar so her team can be aware of the distance to the digger • Vegetation shall be spread out not stockpiled in one position. This is to enable any eels caught to have a chance of returning to the drains. It is understood that in some areas it might be difficult to feather out due to limited space available A few issues raised by farmers, and they advised that it would be easier if left in heaps – to be discussed with Hydrotech • Justine advised that fences along drains have been damaged -Hydrotech to be notified • Drainage, Spraying and Cleaning -Audit required <p>Stopbank repair work to Apotu Road</p> <ul style="list-style-type: none"> • Work started on 14th January 2022 • Material was inconsistent: branches, stumps, organic material • Excavation work completed by 20th January 2022 • Some areas dug up to 2,2 metres to reach clay layer • HG carried out the Geotech survey but could not identify/detect the organic layer 	<p>Corey/Hydrotech & WDC audits required</p> <p>Corey to send report ow what is been re done and re sprayed</p> <p>Corey to discuss spraying issues with Hydrotech</p> <p>Hydrotech</p> <p>Hydrotech</p> <p>Hydrotech</p> <p>Hai to check if this correct</p> <p>Discuss with Hydrotech</p> <p>Corey to inspect and report back to Justine</p>	<p>Agreed to proceed</p>
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	<ul style="list-style-type: none"> Proposed to dig out additional material and extra backfill Additional backfill required Contractor completed dig out of additional 0.5 metres on 16th February 2022 Further test to be carried out Estimated completion date on 23rd February 2022 Action to keep an eye on it and monitor over flood events <p>Ngararatunua Stop bank damage</p> <ul style="list-style-type: none"> This is coming up to 12 months since damaged Hydrotech to go ahead and fix it Pedro to fence off as well <p>Junction Flood gate was repaired in house; sand blasted, then painted</p> <p>Failure of level sensor cabinet at Tanekaha 1</p> <ul style="list-style-type: none"> 2 Monitors broken and need to be fixed before winter McKay quoted to repair \$3117.88 GST Incl. Due to the deterioration of the plastic brackets suggestion made that why couldn't a bracket be placed inside and bolted through the back Reinforced from the inside. <p>Number of pump stations under auto during winter</p> <ul style="list-style-type: none"> Tanekaha - yes Te Mata - yes Junction - yes Otanga – only pump D Mountain – only pump A Okarika – 2 big pumps Ngararatunua - No <p>Hydraulic Modelling Update</p> <ul style="list-style-type: none"> Jesse visited all pump stations on 15th February to get a better understanding of the river and stop banks <p>Goals</p> <ul style="list-style-type: none"> Reduce dependence or eliminate the use of pumps Protect the Tuna Improve Water Quality by targeted environmental restoration Stabilize sediment balance in the catchment through targeted sedimentation areas Improve grazing scheme outcomes Halt land subsidence Provide real time understanding and control of system operation in a centralised format <p>Workstreams</p> <ul style="list-style-type: none"> Real Time Control System Options for reducing dependence on pumps Sedimentation and Water Quality analysis The Details – Structure Specifics, Wetlands and Fish Passage designs <p>Real Time Control System</p>	<p>Dig out additional material and extra backfill</p> <p>Monitor over flood events</p> <p>Proposed to give to Hydrotech under operation costs</p> <p>Hai to check with McKay before work carried out</p> <p>Need to come up with a solution to minimise maintenance costs</p>	<p>with the following variation</p> <p>C: Dig out additional 0.5 metres</p> <p>D. backfill more material estimate 450m3 to strengthen the clay layer</p> <p>A: tidy up the road and repair some potholes</p> <p>Hydrotech to go ahead with repairs</p>
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	<ul style="list-style-type: none"> • Purpose of the Real Time Control Systems and benefits • First stage is complete • Extending 1D Model Jesse explained the difference between 1 & 2D modelling • Additional details to add to the model, lakes and further stopbank improvements • Revising Gauge Rating Curves • Additional gauges rain and river level <p>Options for reducing dependence on pumps</p> <ul style="list-style-type: none"> • Otanga Pocket change of use to achieve plan goals • Hydraulics of system – Identify opportunities and limitations • Costs and ways to offset cost (even make money from the changes) • Storage 45,000,000 cubic meters • Cost Estimates <p>Jesse advised that without a major storage area he does not see how this situation can be improved Chantez questioned if there was a storage area how many pumps would still need to be operating At this stage Jesse was unable to advise without the plan going ahead and more work to be done on the plan he had no answer at this stage.</p> <ul style="list-style-type: none"> • Ownership issues to be resolved before moving forward 	<p>Need to talk to people below the pockets</p> <p>Are farms/land up for sale to be checked</p> <p>Outside funding to fund the scheme</p>	
Living Water	<p>Continuous monitoring</p> <ul style="list-style-type: none"> • Water levels • Turbidity • Dissolved Oxygen • Conductivity <p>Rainfall event monitoring</p> <ul style="list-style-type: none"> • First rainfall event on 6th -8th February 2022 • Total solids <p>March – May Activities</p> <ul style="list-style-type: none"> • Monthly Monitoring • Planting maintenance • Fish Survey • Cultural health Assessment • Disseminate detention bund results 	Anh Nguyen	
Next Meeting	<p>Thursday 26th May Starting at 10.30am to 12.30pm</p>	Trisha	

Meeting closed at 12.30pm

Meeting Actions

Point Number	Action	Responsible person	Timeframe Due	Notes
1	Chantez to investigate organisations for possible funding of project which is on hold	Chantez	30 August 2021	Ongoing
2	Chantez and Geoff to organise/investigate commercial eel fishing opportunity & arrange an expert to speak at next meeting	Chantez/Geoff	30 August 2021	Ongoing
3	1-D Hydraulic modelling result.	Jess Wallace	18 th June 2021	In Progress
4	Pump operating procedure and storm readiness – Version 1 approved, revision proposed in meeting agenda to refine	Hai	31 July 2021	In Progress
5	Using a Push-Cam CCTV to monitor if eels are in the pump wells Amended to agree Hydrotech will manually check	Hai / Hydrotech-Corey	30 June 2021	Difficult to execute with high water level and risk of camera getting stuck
6	Terms of Reference Simon and Justine to update draft following discussion in meeting and send proposal changes out to the group for feedback	Simon & Justine	7 th December	Open
7	Separate meeting to be set up to discuss operating with no spare unit for 240HP pump and alternatives to buying a new pump after EWater modelling scenario feasibility meeting	Simon	20 th December	Project delayed reschedule a visit in March 2022
8	Hydrotech to update by February on success of first spray and to communicate if 2 nd spray required	Greg	15 th February	Open – review if more spray required
9	Rushbrook drain – confirm if this is a swamp drain and if it is okay to include it on the spraying plan	Hai	10 th December	Completed Agreed at last meeting to spray once every 3 years and to monitor it
10	Greg will provide a table of the pumps which are or are not on auto during winter	Greg	20 th December	Open
11	Amend protocol and re-circulate by email	Simon	20 th December	Completed – sent to group on 23 rd December 21 for comment
12	WDC to update on electrical review in next meeting and	Hai	31 st January	Open

Point Number	Action	Responsible person	Timeframe Due	Notes
	change to mounted ramp to over cable			Working with contractors to tidy up
13	WDC to provide documented evidence to confirm ownership of swamp scheme (long overdue)	Simon	31 st December	Completed – sent to Group on 24 th February 2021 Gazette regarding Northland Regional Reorganisation Act (1989) Decision made that Ownership issues are to be resolved before moving forward
14	Restart fortnightly focus group Simon to work on solutions and ownership options (not a Friday afternoon)	Simon	31 st December	Open