



MINUTES of the Raglan Wastewater Treatment Plant Discharge Consenting Process meeting (public) held on **TUESDAY 17 NOVEMBER 2020** commencing 7.00pm through **ZOOM** Video Communications.

Present: Cr Aksel Bech (Chairperson), Cr Lisa Thomson, Ian Cathcart, Special Infrastructure Projects Manager (WDC), Carole Nutt, Waters Contract Relationship Manager (WDC)

Steve Howard (Watercare)

Chris Rayner, Fred Lichtwark, John Lawson, Hugh Keane, Waikato Regional Council, Edward Prince, Waikato Regional Council; Phil McCabe, Luke Hughes, Awhina Rooney, Wakerori Rooney, Tony Oosten

Apology: Teresa Hancock, Senior Communications & Engagement Advisor (WDC)

I. OPENING MEETING

1.1 Cr A Bech, Chairperson, opened the Raglan Wastewater Treatment Plant Discharge Consenting meeting (public) at 7.00pm.

The Chair outlined protocols for the Zoom meeting:

- The meeting would be recorded and posted on Council's web page.
- Chats can be seen by all meeting attendees. Use the chat function to record questions, and Steve would answer at the end of the presentation or offline at a later date if not appropriate to answer at the meeting.
- To get the Chair's attention, use electronic hand function.
- If asking a question, have camera on as courtesy to Steve.

1.2 The purpose of the meeting was to hear Steve Howard's presentation on the Raglan Wastewater Treatment Plant (WWT) Discharge Consent Application Project.

2. PRESENTATION/TOPICS - Steve Howard, Watercare

2.1 Matters to discuss:

- Part A - Work Stream Update (Steve Howard)
- Part B - Community Queries – Three Waters Reform (Carole Nutt)
- Part C - Wrap Up/Questions

2.1 Slide 1 – Work Stream Updates (Snap Shot)

Stream		
A/B	Existing and extended outfall (TREATMENT: Pond/TSS Membrane/UV)	
C	Stream Recharge (TREATMENT: MBR treatment)	
D	Deep Bore Injection – No Project Team progression	
E	Non-deficit irrigation with winter storage (TREATMENT: Pond/TSS Membrane/UV)	
F	Non-deficit irrigation with winter alternative disposal (Marine) (TREATMENT: Pond/TSS Membrane/UV)	
G	Re-use - Habitat - and cropping	Project Innovation
H	Bio solids Management	Potential

- The purpose of this slide was to re-iterate workstreams that make up project work. Each meeting highlights areas to be covered. The November meeting covered all streams

2.2 Slide 2 – Existing and Extended Outfall (Work Stream A/B)

Recap:

- Rock bed establishment for securing a pipeline is critical for any point source solution
- To support engineering design work necessary for costing;
- Non-intrusive seismic techniques were used at two sites in Raglan to provide general 1.3 km of shore

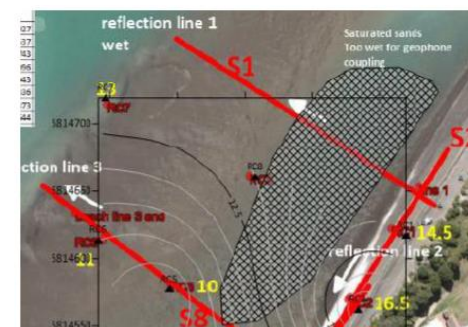
Site	1	2
Range	5.8 - 15m	10 - 16m
Ave Depth	11 m	12 m

Status:

- No further technical work needed

Next Steps:

- Costing Completion: Theoretical drawings of a pipe line that wouldn't be damaged like others



- Explanation has been offered as part of prior meetings on investigation techniques to establish sand depth within the harbour. Meetings have always outlined the need for robust assessment for all options, as it is necessary to understand costing and feasibility of each. There is no pre-conceived position of the final discharge/treatment best practical option. This will be determined: (i) technical multi criteria analysis (ii) hapu assessment and scoring (iii) community assessment and scoring. Alignment in scoring is unknown. It is now established that 11-12m depth exists, where 5m was thought to be the depth based on prior investigation. A rock anchored outlet would need to be costed based on this depth;

2.3 Slide 3 – Stream Recharge (MBR) (Work Stream C)

Recap:

- Discharge solution for treatment option – Stream recharge, with necessary ecological/cultural treatment prior.
- October allowed for ecological testing. Day 1 – Salinity gradient establishment, and trap setting (10 over 100m at two locations). Day 2 – trap retrieval

Broad brush

- Observation of juvenile native species -stream has ecological significance;
- Flow is low – no dilution
- **Stream recharge option is looking more difficult**

Status:

- April- Spawning study

Next Steps:

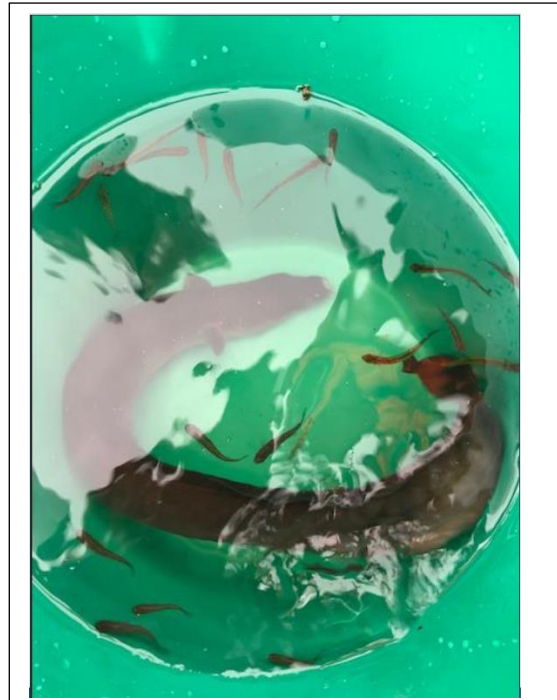
- Part A: Can adverse effects be mitigated?
- Case study: May 2020 –Open Country Waharoa
- Part B: Cultural Bottom lines /Community Lens



MBR – year-round highly treated WW to Waitoa River Discharge declined

- Slides 3-5 outline survey results of the stream, where this will be accompanied by an April spawning count also (hapu assisted). There is encouragement to see native, abundant fish within the water, that is a tribute to harbour health through efforts of many (planting etc). As stated suitability for any treated wastewater after cultural treatment will have lessened ability

2.4 Slide 4



2.5 Slide 5



2.6 Slide 6 – Non-Deficit Irrigation (to land) (Work Stream E and F)

State of Play: Contact (i) 2019 = 6
 (ii) July 2020 = 14 (iii) Oct 2020 = 20
Status: Complete discussion

Next Steps:

- Costing Completion (pumping/piping/operation)
- Prepare a scenario for MCA consideration.

United-F&B-31-Jan
Dairy, beef, grazing, trees and more!
3198 State Highway 23, Raglan, Waikato, Waikato

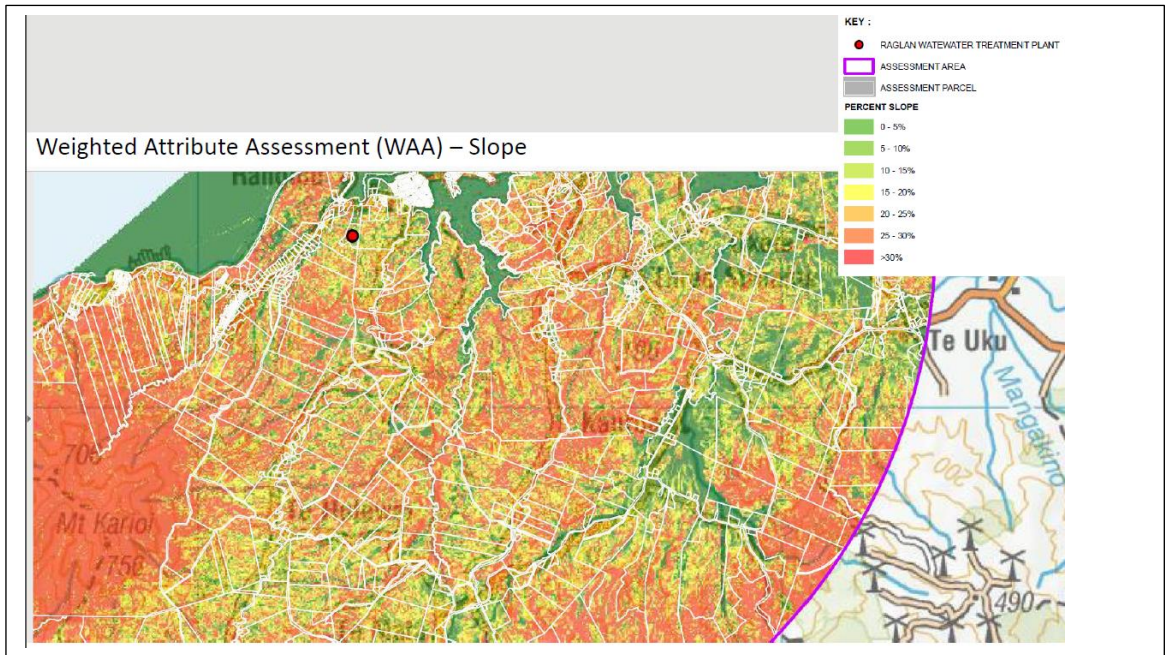
The grazeable area totals around 200ha (150ha eff) with approx 83ha in pines and the balance in native bush.

RayWhite
 An Auckland Council Organisation

Scenario	Land Area (ha)	Storage (m ³)	Annual Irrigation Depth (mm)
Non-Deficit Irrigation	90 - 190	150,000	440 - 800
Non-deficit irrigation with Alternative Discharge	80 - 110	20,000	510 - 770
Deficit Irrigation with Storage	260 - 570	300,000 - 400,000	210 - 320
Deficit Irrigation with Alternative Discharge	220 - 240	20,000	240 - 260

The slide illustrates theoretical desirability of areas for irrigation based on size, topography, distance etc. Contact has been made with many land owners to understand likelihood of sale etc within the near future. Sales do occur (see example). Should irrigation be the BPO, a strategy is needed to acquire necessary parcels. The table highlights that several parcels would be needed for any full or part solution.

2.7 Slide 7 – Weighted Attribute Assessment (WAA) - Slope



2.8 Slide 8

NOV/DEC/JAN UPDATES

Spotted a Māui dolphin? Call 0800 DOC HOT (0800 362 468)

Rounded fin? Send it in! Please report all Māui dolphin sightings

Why so special?
New Zealand's native dolphin, the Māui dolphin, appears to be on the edge of extinction. With fewer than 100 left, the time, money, and local dolphin needs all our help to recover.

Conservation education

permaculture reuse – biosolids trials

RAGLAN WWTP INNOVATION SPACE
Hapu/Community/WDC

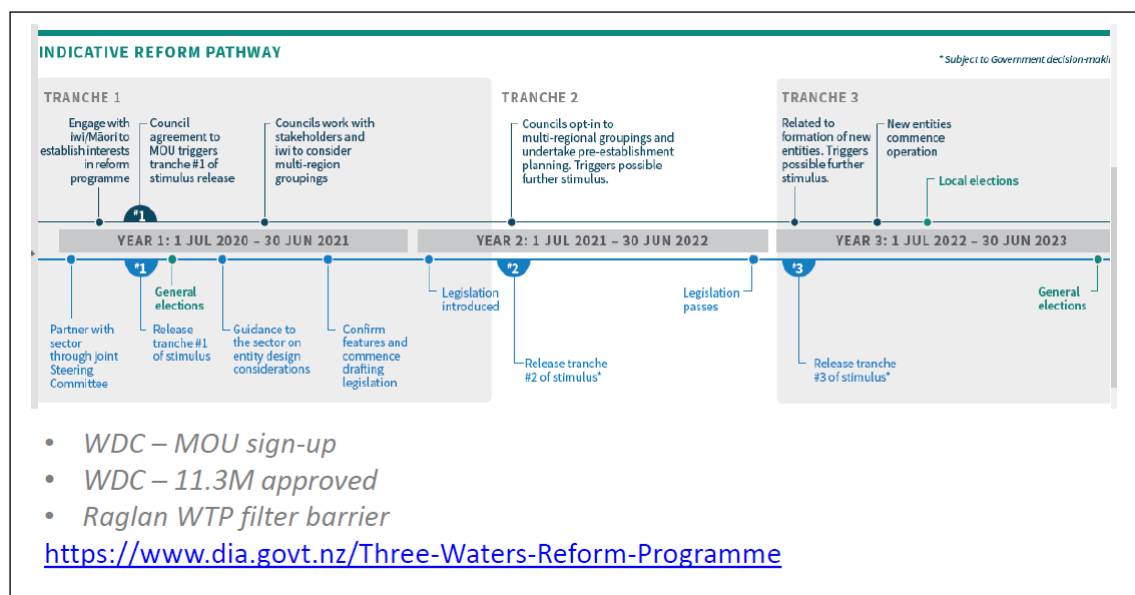
cropping/trials unique habitat/earth-cell
climate change education

A Cropping (chomp)
B Vetiver trial.
C BioSolid reuse (Cocaine? Cadaver?)

ponds 4x 0.45 ha (ponds to be retained with any WWTG Solg)

The slide features a central text box with red arrows pointing to various images: a sign for Māui dolphin sightings, a photo of water treatment tanks, a photo of a field with a fence, a map of the innovation space, a photo of a water treatment tank, a photo of a field with a fence, and a photo of a plant with a root ball.

2.9 Slide 9 – Part B – Three Waters Reform Discussion



Matters covered by Carol – key points were that WDC participated in earlier 3 water central government initiatives, where the 11.3M approved will encompass improvements to water treatment infrastructure

3. QUESTIONS/DISCUSSION

3.1 Chris Rayner

Is MBR treatment still only tied to stream recharge or have we looked at MBR treatment combined with other discharge options?

Steve's Response:

The shortened options list has been adjusted to include the MBR with other discharge options beyond stream recharge (i.e. point source and land discharge).

When you say MBR & land is too expensive has this been costed?

Steve's Response:

Refinement of study options is required as part of any project management, otherwise there is risk in stretching investigation resources to thinly and not making any progress. Cost was one reason the long ocean outfall didn't form part of the short list. Overall affordability meant that greater studies would be wasted money after the initial broad-brush estimate. We know from 2019 that MBR could be 25-30M, and Summer Irrigation with point source would be a similar amount (i.e. with treatment ponds retained – cost is the new network, pumping). There is easy ability to do present costing of MBR /land, as it is simply adding costs together. Given the expanded shortlist, this option will be presented within costing

Edward Prince

Wouldn't you be paying for two treatment streams then? The new Lake Rotoiti/Rotoma MBR plant discharges to Iwi owned land via soakage trenches. Admittedly its only 500m³/day but Iwi seemed happy with it.

Steve's Response:

The two treatment streams you are referring to are: (i) MBR and (ii) Any acceptable cultural treatment that removes tapu (roots and soil contact). As covered in earlier sessions, the Rotoiti/Rotoma system doesn't need to consider the second treatment, as porous volcanic soils have no issue in receiving treated wastewater in summer and winter (a short bore system is used).

3.2 Chris Rayner

Would hapu & community accept tidal outflow near the existing outfall if there was MBR treatment with manmade cultural polishing while we develop reuse and land-based discharge?

Steve's Response:

A key query – Response and facts are:

- *Clarity is offered by hapu that:*
 - *the location of the point source is offensive -particularly on the doorstep of hapu ancestral land and near food gathering locations (mussel beds) – an alternative point is difficult*
 - *any co-mixing of treated wastewater would be the best quality through roots and soil, which would be a demonstration of irrigation as re-use;*
 - *Past examples of cultural treatment (gabion baskets/blessed stones) wouldn't be an acceptable solution for hapu.*
- *Passing through natural systems will have influence on discharge quality where WRC acceptance of discharge quality will need to be established – Solution- formal WRC pre-app work shop on matters to consider challenges with such an option – Steve to do list 2021.*

4. Closing of Meeting

Cr Bech thanked everybody for their attendance at this Zoom meeting.

Meeting closed at 8.00pm.