

Nature Calls briefing

November, 2022.

Nature Calls is the biggest financial and environmental decision our city needs to make

- Nature Calls determines how we treat and discharge wastewater for the next 35 years
- Current consents expire in June 2028. Consent application due at Horizons in December 2022.
- RMA requires us to investigate all options for treatment and discharge in the future
- Legal advice confirmed project must continue despite proposed three waters reforms.
- During project there have been changes to freshwater policy, and our residents love for our awa continues to go from strength to strength following Manawatu River Framework projects.



Iwi and mana whenua have played a vital role



- Rangitāne have been on our steering group since day 1 and now play a key role in our governance group
- Worked closely with Raukawa and Ngāti Whakātere who are on our Project Reference Group
- Iwi have been helping guide the project and provided crucial information regarding tikanga, te ao māori and cultural assessments

Initially a steering group guided the project



- Steering group guided the project for the first four years to select the BPO.
- Members included: ELT, 3x Elected Members, The Mayor, Council officers, technical experts and Rangitāne
- Met monthly for 2-3 hours to guide the project, receive updates, raise questions or concerns and widen scope where needed
- Steering group was dis-established late 2021 when the BPO was agreed.

A lot went into choosing our Best Practicable Option (BPO)

- More than 20 technical assessments. Peer reviewed immediately by external technical experts and officers
- Include things like: river, ocean and groundwater modelling, soil analysis, archaeology, cultural assessments, technological requirements, public health requirements, innovation and environmental impact.
- Multi Criteria Assessments (see handout)
- Public consultations
- Steering group analysis



Significant public engagement occurred

Three key periods:

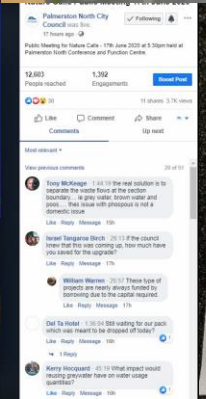
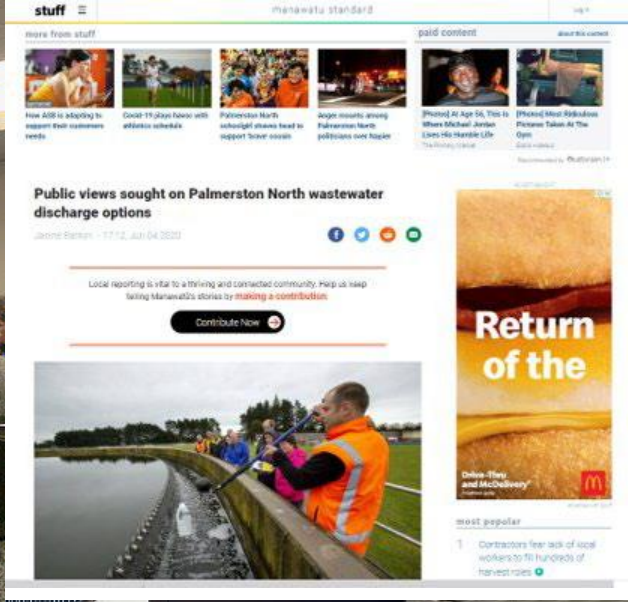
- Education period- Jan/Feb 2020
- Consultation June 2020
- Consultation June 2021

One of the widest raging public engagements council has ever done.

- Resulted in 1600 submissions

Covid meant we had a highly hybrid approach of on the ground engagement and digital/print as well as options to ensure people felt comfortable.





Our BPO is a hybrid option and ensures one of the best levels of treatment in NZ



In Sept' 21, Council selected its Best Practicable Option.

- Highly treated water discharged to river or irrigated to land depending on river flow levels.
- Discharge to land when river levels running low and low flow- usually over Summer period.
- Council endorsed a capped land area of 760 ha over life of consent , to provide certainty to farming / agricultural community.
- Council committed to having one of the highest treated wastewater processes in New Zealand- and our design does just that!
- Particles smaller than 0.04 microns removed which can include things like viruses, bacteria and all suspended solids. We'll also be removing most of the nitrogen and phosphorus.
- Compared to most other large infrastructure projects, this has a relatively short period for actually preparing the consent.
- Originally, we planned on treating the wastewater differently to the land (to a lower level), but by keeping it as the same treatment as for the river means it can be used as a resource.

A reference group then guided us on our application

- Steering group disbanded in 2021 and reference group created soon after to guide us on our consent application and adaptive management plan.
- Have met monthly and proven to be a great option for this project.
- Horizons attend as an observer

Role / Organisation	Nominee / Representative
Independent Chair	David Warburton
Rangitāne	Jonathon Proctor
Ngāti Turanga – Raukawa	Hayden Turoa (Raukawa)
Rūnunga o Raukawa	Rariti Mataki
Te Roopu Taiao o Ngāti Whakatere	Robert Ketu (Raukawa)
Trade and Industrial Waters Forum	Geoff Young
MidCentral DHB	Brett Munro
Manawatu Chamber of Commerce	Amanda Linsley
Horizons Regional Council (observer)	Nic Peet
Food and Fibre Forum	Peter Wells
Fish and Game Wellington region	Phil Teal
Federated Farmers	Murray Holdaway
Environment Network Manawatu	Stewart Harrex
Department of Internal Affairs	Ian McSherry
Department of Conservation	Chelsea Kenny
Council Elected Member	Cr Brent Barrett

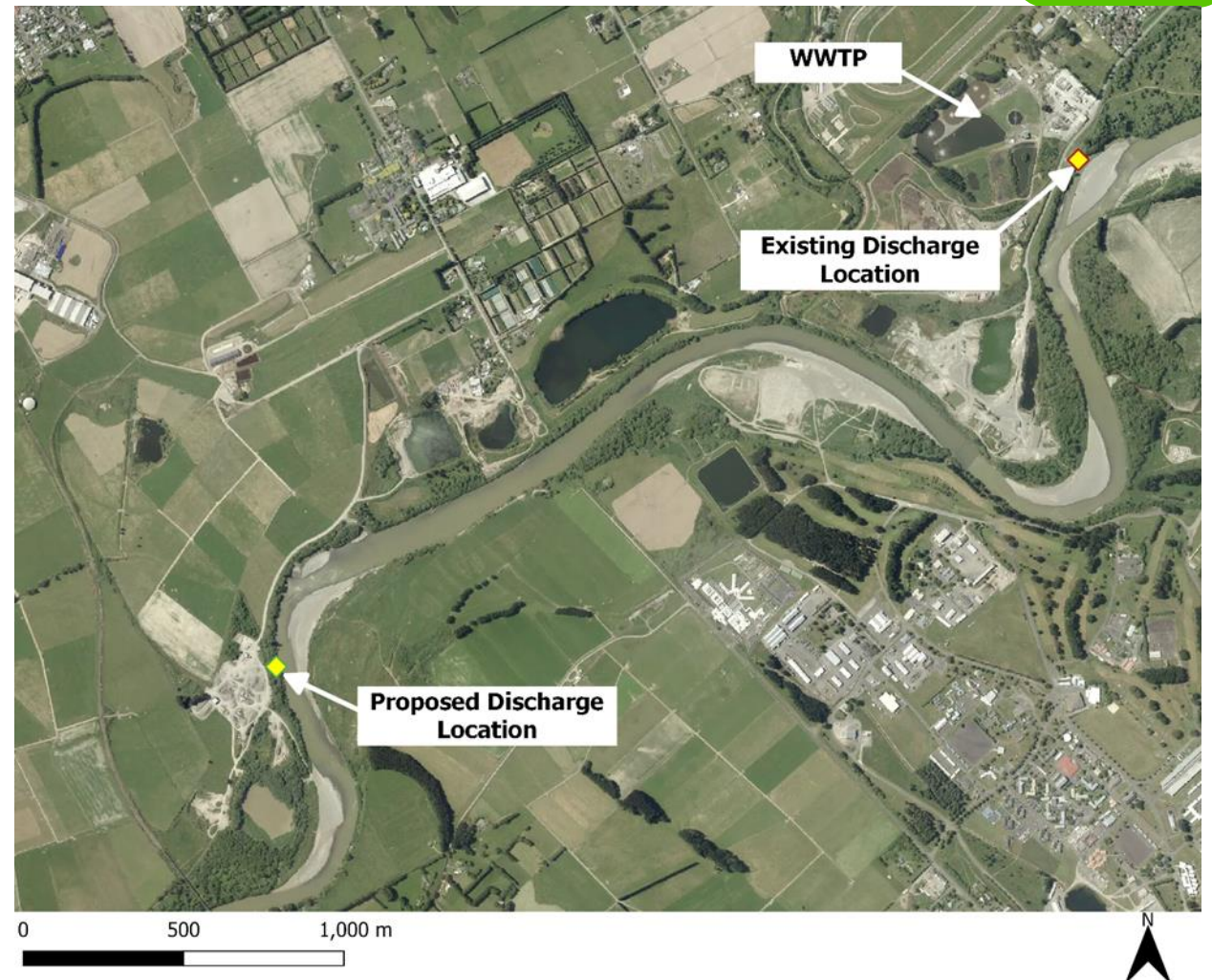
We've done a lot over the past year

- In-field testing
- Assessment of environmental effects
- Cultural, archaeological, recreation survey
- Confirmed treatment of wastewater to be highest in NZ
- Concept design for treatment plant
- Writing the consent
- Working on the adaptive management strategy
- Developing a Biosolids Strategy
- Working with and communicating with stakeholders



River Discharge 101

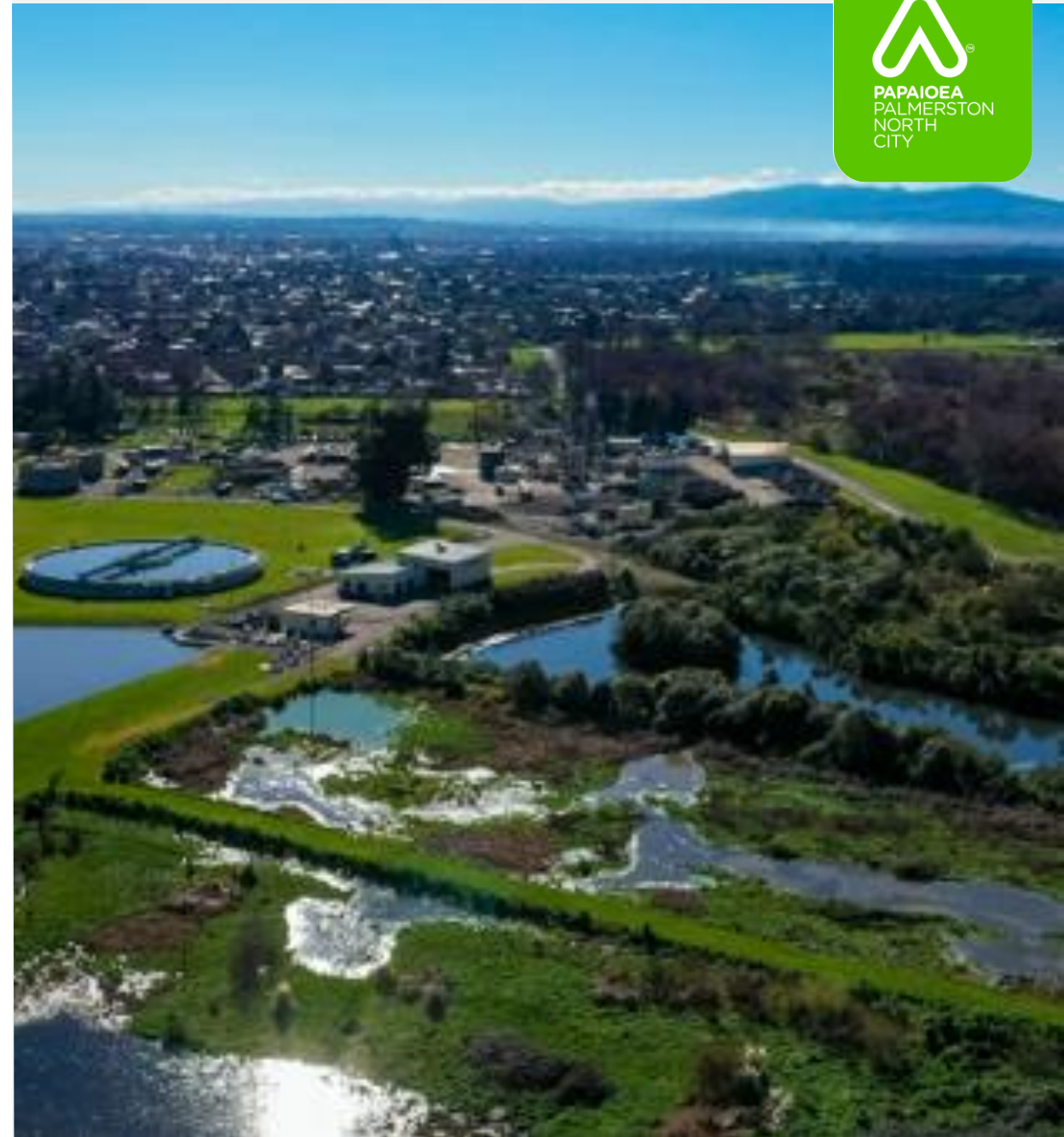
- At low river flows at least 75% of the treated wastewater will be discharges to land.
- Quality of water entering our awa is significantly improved.
- **We need to move the location of the discharge further downstream.**
- Our entire consent has been written based on this change, and we have consulted with Rangitāne on the proposed location, and with Horizons engineers
- The proposed new location for the river discharge has been chosen because it could enable better mixing and is downstream form the proposed Kākātangiata development.



Wetland would be included in the rohe of Rangitāne

- Despite high treatment quality and some wastewater to land, there is still residual negative effects on the awa and cultural values.
- Instead of an engineered treatment wetland, Rangitāne have advised us that offsetting the residual effects on the mauri of the awa is more appropriate and another part of the awa environment should be restored
- Determined not to be at the discharge point, but somewhere else.
- Location hasn't been confirmed and conversations are ongoing with Rangitāne and other council teams
- Future of existing small wetland pond at the WWTP still being determined.

Picture: existing wetland at treatment plant



Land discharge 101

- The area on right is our 'area of interest'
- Soil testing has confirmed suitable soils there
- Haven't confirmed crop for site – would be determined once a land location is picked. Could offset some costs as a form of revenue.
- We have had discussions with two of the landowners and these are ongoing.
- Many options for the land : purchasing, leasing the land and we lead the operation, or us contracting the landowner to do it.
- Irrigation when river levels low which provides resilience in heavy rain/winter and any potential for flooding



Consent seeks land discharge is as a 'global consent'



- Global consent means we will in time need to identify land and assess and mitigate the environmental affects – this will need to be further certified by Horizons
- Approach means if Three Waters' Agency proposes any changes it won't have affected landowners
- Not specifying specific land parcels means Horizons could come back to us seeking more information about effects of the land discharge
- Other options for beneficial re-use and the community generating less wastewater could reduce the land needed for irrigation and discharge to the awa

Adaptive management strategy is being developed

Objectives:

- Reduction in wastewater being discharged to River and restoration of natural awa landscapes and cultural enhancement
- Quality of treated wastewater enhanced over term of consent.
- Consider wastewater as a resource

Ideas and strategy still being finalised but could include:

- Reducing the amount of wastewater generated by the community of Palmerston North.
- Expanding consented land application areas and including additional new areas, but re-use of water could also reduce the amount of land needed and the discharge to the awa
- Other beneficial use of treated wastewater e.g., non-potable use and industrial reuse.
- Additional wastewater treatment to further enhance quality.
- Beneficial reuse and resource recovery of other WWTP by-products including energy

Next steps:

- Identify work and initiatives, prioritisation of any initiatives, determine programme needs.
- Council officers and Rangitāne oversee preparation of strategy and updates, review land application site, prepare Mātauranga Māori Monitoring Plan, develop strategies to address any non-compliance, community education.
- Elected Members oversee the development of the Adaptive Management Strategy
- Bottom lines will be set in conditions.

Please Note: The strategy and how we do this doesn't need to be finalised until after our consent is granted.

We will explain that we are working on this, who is involved and things we're considering.

Proposed timeframes for operating

- We're seeking consent to treat and discharge wastewater for up to the next 35 years. We model needs for 50 years to account for population growth.
- These consents relate to the discharge and treatment only. They do not relate to building consents, land use consents/approvals also being required for any changes to treatment plant, pipework etc
- Proposing to be operational by 2033 at the latest. Normal for big infrastructure projects to assume five years for seeking further information/hearings/if goes to Environment Court. We then assume another five years for consenting and construction of any equipment.
- Horizons determine timeframe for operation starting and length of consent.
- As our consents expire in 2028 as part of our application we apply for 'short term consents' which allow us to keep doing what we're doing and be up to standard.

A lengthy process starts once we hand in our consent applications



- Consent gets lodged electronically with Horizons and printed copies supplied to them
- Council and Horizons working on a joint media statement. An update will be placed on our website, shared with submitters and stakeholders and shared publicly.
- The consent application cannot be fully made public until publicly notified. When that's done there will be copies at our Customer Service Centre, libraries, and on our website.
- We expect that we'll be asked for more information on some aspects of our application- this is very normal for infrastructure projects of this scale.
- Most likely Horizons will 'publicly notify' our application, which is where people can give feedback.
- When the hearing occurs we will explain our application, how we got to where we did and technical experts may give evidence.

Next steps for us



Dec 14

Officers bring consent
lodgement
endorsement to
Council



Dec 19

Consent application
handed over to
Horizons. Public
communication occurs



2023 onwards

We follow
Horizons' lead as the
regulatory process is
underway.



Early 2023

We will give a project
update to you,
including expected
costs for the next
stages of the project

Quality Assurance Review



In September, the Finance and Audit Committee requested that Business Assurance develop a quality assurance framework for this project.

- Business Assurance has met with and will continue to meet with project team and has been part of some governance meetings.
- That is informing the framework which will be presented to Council in Feb/March. If funding is required that would be requested then.
- Then will implement framework post approval



PAPAIOEA
PALMERSTON
NORTH
CITY



Let us answer your questions

TEKETE TE KAKA, KUKU TE KEPE
NOT CHATTERS, THE PIGEON CO