

MEMORANDUM

TO: Planning & Strategy Committee

MEETING DATE: 11 May 2022

TITLE: Wastewater Discharge Consent Project - Progress Update

PRESENTED BY: Mike Monaghan, Group Manager - 3 Waters

APPROVED BY: Sarah Sinclair, Chief Infrastructure Officer

RECOMMENDATION TO PLANNING & STRATEGY COMMITTEE

- 1. That Council note the progress update on the Wastewater Discharge Consent project.**
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1. BACKGROUND

- 1.1 Council formally adopted the preferred Best Practicable Option (BPO) for the future management of the city's wastewater at the Extraordinary Meeting of Council held on 15 September 2021. An Adaptive Management approach was adopted as part of this resolution which enables an enduring focus on limiting the amount of highly treated wastewater that is discharged to both land and river, by finding beneficial other uses and by reducing the amount of wastewater generated by the City.
- 1.2 Following the endorsement of the BPO the Project Team are progressing a 'consentable solution'. The PNCC Wastewater Treatment Plant (WWTP) discharge remains authorised by the current discharge consent until 2028. This provides time to seek a new discharge consent and construct the consented solution.
- 1.3 This phase of the project is now known as the 'Wastewater Discharge Consent Programme' (WDCP).

The WDCP will develop and determine -

- Concept Design of the wastewater treatment plant sufficient to satisfy the information requirements of the resource consent application
 - Assess the effects of the BPO for land and river discharges
 - Specific mitigation to be included in the application for new consents.
- 1.4 In December 2021 Council endorsed the recommendations for the Consenting Phase Implementation. These included:

1. That Council note the appointment of Beca New Zealand Ltd. to undertake Project Management Services for the project.
2. That Council approve the Award of Contract 4096 for Consent Phase Lead Technical Services to Stantec New Zealand Ltd. for a duration of two years from 1 December 2021 to 30 November 2023.
3. That Council approve a new Capital Programme titled Wastewater BPO Consent Renewal with a budget of \$2,500,000 for the 2021-22 financial year to secure consents from the proposed Best Practicable Option.
4. That Council endorse the establishment of a Consent Phase Project Reference Group (as amended) to facilitate engagement with key stakeholders on the project including the development of the adaptive management approach to be adopted within the wastewater consent application.
5. That Council release the report and Attachment 2 (Project Reference Group Terms of Reference) upon signing of the contract in Recommendation 2.
6. That Council note that operating programme 1319 be removed.

2. UPDATE ON PROJECT PROGRESS

Technical Workstreams

- 2.1 Following the engagement of the lead designer Stantec (supported by PDP consultancy), supporting specialists have been engaged including Aqualink (reviewers for the irrigation workstream), Aquanet (river monitoring and modelling), Simpson Grierson (legal advisor), The Property Group and others including iwi and hapu advisors.
- 2.2 The workstreams that are being undertaken for this stage of consenting are:

Task	What are we trying to determine
Land application areas investigation	To demonstrate that there are suitable sites for the irrigation of the highly treated wastewater
Wastewater flows and loads	To develop future projections of the amount of wastewater and the contaminant loads for the next 50 years, to ensure that the design of the treatment is suitable for future changes in population and water usage.
River modelling	Modelling of the river water quality and ecology, as a baseline of current day,

	and with future projections of the highly treated in-river discharges to confirm wastewater treatment levels to meet regulatory requirements
Wastewater treatment plant concept design	Further development of the treatment concept, including changes to layout of the existing plant to add new processes to meet required treatment standards
Treated wastewater pipeline concepts	Work to determine options for the location of the wastewater pipelines required to convey the treated wastewater from the plant to the land application areas
Effects investigations – River discharge	Investigations required for the assessment of effects for the resource consent applications. These include <ul style="list-style-type: none"> • Public health risk assessment • Water quality and ecology • Recreation • Water supply protection
Effects investigations - Land	Investigations required for the assessment of effects for the resource consent applications. These include <ul style="list-style-type: none"> • Public health risk assessment • Terrestrial ecology • Water supply protection • Groundwater quality • Sensitives land uses • Social and economic • Archaeological
Cultural values assessment	This assessment is prepared by tangata whenua and assesses the effects of the wastewater scheme on such matters as the river, mauri, sites of significance, mahinga kai, kaitiakitanga

2.3 These workstreams will lead to the development of the consent application documents, and the assessment of effects on which the consents are based.

Technical Workstreams Updates

Land Application workstream

- 2.4 Identification of land for testing its suitability for irrigation is a high priority. An advisory group has been established with PDP, The Property Group, Federated Farmers and Food and Fibre.
- 2.5 The Project Team have identified a larger land area to focus further investigations within. This area has been identified through an assessment process, with larger land parcels being preferred to maximise the available area to discharge wastewater per property.
- 2.6 The Project Team are aware of concern in the farming community about identification of land for the irrigation. Discussions with Food & Fibre and Federated Farmers have highlighted this matter on several occasions.
- 2.8 At the end of April contact has been made with several landowners to seek permission to undertake soil investigations. The soil investigations are required to inform the Land Application workstream.
- 2.9 A media release and a letter drop to properties with the spatial area identified for investigations occurred in early May. The letter drop included approximately 600 properties and the letter provided a project update to these property owners.
- 2.10 Communications regarding the soil investigation elaborate that the testing proposed does not pre-determine those land parcels are being required for the discharge of wastewater for the project. These investigations are required to collect information within a geographical area.

Data Gathering and Monitoring workstream

- 2.11 Data continues to be collected for the monitoring regime required as baseline information to inform the consent application. Ecological information is being collected from the Manawatū River to provide baseline data to be used for the freshwater assessments of impact of the discharge.
- 2.12 Officers continue to seek advice from iwi partners and other experts on the monitoring required at this consent stage.

Design Workstreams

- 2.13 The Flows and Loads Workstream has been progressed near to completion. This comprises assessments of inputs into the plant over the next 50 years, including trade waste, and is assumption based. There have been some discussions with significant trade waste producers, which will continue through the consenting process, to ensure any planned future changes in trade waste at this stage are included in our assumptions.
- 2.14 The Flows and Loads workstream also includes assumptions about discharges from the plant. Work continues on adaptive management, utilising the skills and experience of the project reference group – at this stage broad

assumptions have been made about the levels of flow to be discharged, to enable the remaining design work to progress.

- 2.15 The Concept Design workstream for the Wastewater Treatment Plant has been scoped and agreed with Stantec.
- 2.16 The BPO process selected Treatment Level 4 (TL4) for the Project. However, at that time design concepts had not resolved whether there would be a different level of treatment for the land discharge, to preserve more nutrient in the treated water. At current concept design stage, consideration has been given by the design team to what this would entail in practice – likely two different treatment trains for at least part of the treatment process. This has cost and operational implications.
- 2.17 Consideration is also being given to the consequential operating costs of cut and carry farm management potentially requiring added nutrient if the water is treated to a TL4 level, whilst noting that adaptive uses of treated water will be significantly greater if the water is produced without nutrient.
- 2.18 Treatment scenarios have been integral in discussions with Rangitāne in recent months, with Rangitāne indicating a preference for TL4 100% of the time.
- 2.19 Work on a strategy for biosolids has commenced – at present biosolids from the treatment plant are composted and used at the closed landfill at Awapuni. Future scenarios indicate that more biosolid will be produced with the new treatment regime, and the use of biosolids to create the closed landfill capping layer will not be required for the whole consent period. Therefore, other disposal options have to be identified and costed.

Consent Preparation

- 2.20 A Draft Consent Strategy has also been prepared by Stantec and is being worked through with the wider project team. The Consent Strategy is an important milestone to outline the statutory approvals and consenting pathway for the Project, and strongly influences the workstreams and the programme for completion of the consent application.

Project Partner, Iwi and Stakeholder Engagement

- 2.21 The complexity of the work has necessitated a flexible approach, to ensure we work with project partners in a way that works for them, and brings best advice to the project team. Whilst a variety of forums and advice groups have been established, one-to-one engagement is also undertaken with project partners and stakeholders.

Separately to the advice elements, some iwi partners are involved in co-design within specific workstreams. This is separate to tangata whenua inputs on the cultural values assessment, and strives to bring mātauranga Māori advice into the design process.

Project Reference Group

- 2.22 Further to resolution 4 in section 1.4 above, a Project Reference Group (PRG) has been established. Councillor Brent Barrett joined the PRG as an Elected Member representative in 2022. The membership of the group is included in Attachment 1. The group meets monthly, and Councillors now receive a monthly update approximately one week after the PRG, to reflect the PRG briefing from Councillor Barrett.
- 2.23 To facilitate the development of Adaptive Management options for the project Jim Bradley (Stantec) and Mike Monaghan (PNCC) have presented on existing Adaptive Management carried out at the PNCC Wastewater Treatment Plant and other techniques used around New Zealand. The PRG attendees have been invited to submit their ideas to the Project Team for investigation.

Ngāti Whakare

- 2.24 A Memorandum of Agreement has been developed with Ngāti Whakare, a hapu of Ngāti Raukawa, which recognises the ongoing effects of waterwater discharges into the river on their hapū. Technical specialists from Ngāti Whakare will join the Project Technical team to advise on specific interest areas. Ngāti Whakare have extended an invitation to councillors to visit their marae in Shannon and build relationships now the COVID 'red settings' are relaxed to amber. The Project Team is working with the governance team to facilitate this.

Te Tūmatakahuki

- 2.25 The Project Team have recently met with representatives from Te Tūmatakahuki, a group which represents the coastal hapu of Ngāti Raukawa. Discussions are ongoing to develop an ongoing working arrangement, and work scopes.

Farming Community

- 2.26 A farm advisor has been appointed to support engagement with the farming community, and to advise on farm management options and costs as the consent development progresses. Regular meetings have been held with Federated Farmers and Food and Fibre representatives from the Project Reference Group, working alongside the Property Group to develop approaches to landowner engagement.

Other Stakeholders

- 2.27 The project team presented to the Foxton Community Board on 29 January 2022. The team presented on the BPO resolutions, and on the workstreams for this consent stage. The Community Board were pleased that PNCC had selected such a high treatment level for the plant.

- 2.28 Discussions have commenced with Fonterra, both as a trade waste customer and as representing some elements of the dairy industry locally.
- 2.29 Horizons Regional Council has invited PNCC to present on the Project in June.

Public information

- 2.30 Although the consent application development does not have a high level of public engagement required for decision-making, the website has been updated to coincide with the commencement of landowner engagement. The “Nature Calls” branding continues for this consenting stage.

Project Programme

- 2.31 The draft programme included in the December 2021 Council paper highlighted that the significant amount of work which is required to prepare an application of the required standard cannot be completed in the period prior to 1 June 2022 which is the existing consent target date.
- 2.32 The inability to meet this deadline is a flow-on effect resulting from COVID-19 delays during the BPO Phase. Condition 23C required that the BPO was lodged in June 2021 and this was delivered to Horizons in September 2021. At the time of development of the consent conditions, there was a 1 year timespan allocated between the BPO decision and the lodgement of consent, presumably to allow sufficient time to develop a good quality consent application. The overall consent to discharge is valid until 2028, presumably to also reflect the significant work required to design and build a new treatment facility after consent is granted.
- 2.33 The December 2021 paper highlighted the significant work required particularly in respect of the refinement of the land areas, identification of the land areas for assessment as well as the significant engagement with iwi and affected parties. At the time, it was assumed that a lodgement in September, to reflect a 1-year work programme for the consent application was more realistic. The ongoing effects of Covid-19 have impacted the team, both in terms of illness across the supply chain slowing down work, and added difficulties in engagement and face-to-face meetings, including site meetings, through different levels.
- 2.34 The project team have determined that more time is needed to develop the consent in this context and have estimated a likely project completion of 31 December.
- 2.35 The issue of the lodgement date was discussed with Rangitāne representatives and they reluctantly agreed to the extension of the programme of works to the 31 December 2022. With their support, contact was made with Horizons Regional Council to advise them of the delay.

2.36 A letter was sent to Horizons on 21 March 2022 to outline the challenges associated with meeting the consent condition 23C relating to the June 2022 lodgement date. This letter detailed the work underway, to demonstrate that work continues to progress on the project in earnest, despite the many challenges associated with the pandemic. Horizons Regional Council has acknowledged the letter and the likely programme delay and is aware of the significant and complex work that Council have done to develop the BPO and progress the consent application.

2.37 Officers sought legal advice from Simpson Grierson. Based on their advice, officers are comfortable that this is a practicable approach to expedite the delivery of the consent application documents.

3. PROJECT BUDGET

3.1 A consequence of the later lodgement of the resource consent application is the required carry over of capital spend.

3.2 The December Council paper estimated a spend of \$2.5M for the FY2021/2022. Spend to date of \$754,329 is behind estimated spend for this period, based on the idea that the application will take 6 months longer than originally anticipated.

3.3 The cost analysis is being updated to bring information into the Annual Plan process

4. PROJECT RISKS

4.1 High priority risks to the Project include are outlined in Table 2 below– the table reflects the unmitigated risks and consequences, and the revised risk after identification and mitigation by the project team

Table 2 – Key Project Risks

Risk	Unmitigated Likelihood	Unmitigated Consequence	Mitigated Risk Level
Insufficient Budget	Likely	Major	Moderate Budget requires careful management for a project of this size and scale. An external PM has been appointed
Ability to develop 'robust' consent application for December 2022 lodgement	Likely	Major	Moderate Delay from June to December will require careful management due to Land Discharge Area

			<p>workstream. An external PM has been appointed, plus a land advisor.</p> <p>Project control group meets weekly to review programme and address issues.</p>
External influences resulting in delays (i.e. COVID-19)	Likely	Moderate	<p>Moderate</p> <p>Lessening of alert levels and BAU working resulting is reduced/no further lockdowns. However, the future risks related to Covid 19 cannot be predicted.</p>
Ability to access land for land discharge area testing	Likely	Major	<p>Moderate</p> <p>Lack of land access has ability to impact technical assessment development for consent lodgement. Mitigations include identifications of alternate landowners, and an assumptions-based approach if required</p>
Effects on the mauri of the river and Cultural Effects	Likely	Major	<p>Moderate</p> <p>Being addressed through the various Project forums, requires careful consideration to mitigate cultural effects throughout Project development. High treatment levels are a mitigation</p>
Iwi Relationships	Likely	Major	<p>Moderate</p> <p>Working relationships and agreements being developed. Requires ongoing consideration and management. Project sponsors and senior managers heavily involved in relationship development</p>

4.2 Project risks will be closely monitored through the Project Control Group and will be reported to Council periodically.

5. NEXT STEPS

5.1 The Project Team will provide quarterly updates to the Council on the development of the consent application.

5.2 Monthly updates will be provided to Council via the Project Reference Group.

Attachments

1. Project Reference Group Membership
2. Legal Advice- deferral of lodgement - **Confidential**