

Nature Calls media releases 2017 to 2021

Council committed to finding best wastewater solution for city

Tuesday May 30 2017

Palmerston North City Council has formally started work on a future wastewater scheme for the city.

A statement of intent adopted by Council yesterday aims to have a decision on the best option for the city no later than December 2020.

"How we deal with wastewater is a critical issue for our city and has a significant impact on the health of our river," says Robert van Bentum, Water & Waste Services Manager at Palmerston North City Council.

"Our current consent requires Council to apply for a new consent by June 2022. While that seems like a long way off, we need time to investigate the options and to consult with community and iwi to ensure we make the best decision for our city. The statement of intent adopted by Council today is a great step forward, demonstrating their commitment to the health of our river and to getting this right with the community."

Currently, all of the city's wastewater is delivered to the Tōtara Road Wastewater Treatment Plant, where the majority of contaminants are removed before it's discharged into the Manawatū River. Council is a member of the Manawatū River Leaders Accord and has been working to reduce the number of treated wastewater discharges throughout its catchment to enhance the water quality of the river.

"Shortly we'll identify a wide range of options for the future scheme which will include river based disposal like we have now, land based disposal, or a mixture of both. Ultimately we want to put a system in place that helps improve the health of our river in a way that's sustainable for our ratepayers."

A project group has been established to guide the development of options and lead engagement with iwi and community. The group will then make a recommendation to Council around December 2020. Resource consents will be lodged no later than June 2022 to ensure the new scheme is in place as soon as possible.

Engagement with the community will occur at several stages during the project.

PNCC appoints David Warburton to lead wastewater treatment review

Wednesday April 4 2018

Palmerston North City Council has appointed David Warburton to chair the project steering group for the best practicable option review of its wastewater treatment plant upgrade.

Council Chief Executive Heather Shotter says Dr Warburton's extensive experience in infrastructure project development will be of tremendous benefit to the city.

"Future-proofing our wastewater treatment plant is a critical investment for Palmerston North, and it's essential that the project has access to the foremost expertise in all respects. David Warburton's background in strategic leadership of infrastructure development is exemplary, and we're delighted he's accepted our invitation to chair the project steering group."

Dr Warburton was Chief Executive of Auckland Transport from 2010 to 2017, overseeing transport strategy, design, construction, maintenance and operation throughout the Auckland region. He has served in governance roles with a range of companies across sectors including the primary industries, energy, and property development, and was Chief Executive of Whanganui District Council from 2005 to 2008.

Ms Shotter says the role of steering group Chair is essential in laying the foundations for successful delivery of the wastewater treatment plant upgrade.

"The steering group brings together representatives and advisors from all stakeholders to provide governance, oversight and direction to the entire best practicable option project. As an experienced, independent Chair, Dr Warburton will ensure the review process is effective, thorough and robust."

Dr Warburton says he looks forward to taking up the post.

"Prior to Auckland Transport I worked for many years in regional New Zealand, in private and public sectors, and appreciate how vital it is to deliver the right infrastructure to support growth and regional development from a range of perspectives. It's a privilege to be part of a project that will benefit the people of Palmerston North for generations."

Dr Warburton officially chaired his first meeting of the project steering group on 23 March 2018.

River, land, groundwater and ocean wastewater options being explored

Monday June 24 2019

Discharging treated wastewater to the Manawatū River, land, groundwater, and the ocean are among six options for managing, treating and discharging Palmerston North's wastewater in the future.

Council today confirmed that six options will be investigated in more detail as part of its Nature Calls project, before the best practicable option is confirmed in late 2020.

Nature Calls is one of the largest projects Palmerston North City Council has undertaken, and will investigate, consult with stakeholders, and help make decisions about how Council will manage, treat and discharge wastewater in the future.

Palmerston North City Council's Chief Infrastructure Officer, Tom Williams, said that when selecting a shortlist, Council wanted to retain a broad range of options to explore further.

"This is an important project for Palmerston North – our city's population is growing and the value being placed on our environment is high," Mr Williams said.

"We are investigating six options that involve discharging treated wastewater to a range of different environments, to allow us to determine the best practicable solution for our city.

"One option will discharge all treated wastewater to the Manawatū River, while five involve applying some treated wastewater to land, with the remainder being discharged to either the Manawatū River, groundwater, or the ocean," Mr Williams said.

"We are working closely with iwi, and to recognise Māori cultural values, any discharge to the Manawatū River will first pass through a wetland or land passage system. This reinforces the importance of the earth in cleansing the treated wastewater before it enters the river."

Earlier this year, a longlist of 26 options for how wastewater could be managed, treated and discharged was developed, and after a robust assessment and testing process six options have been selected to make up the shortlist.

The assessment process considered the impact options may have on the natural environment, public health, Māori cultural values, social and community considerations, financial implications, resilience, technology, and the ability for the city to grow and develop.

Consultation will begin in early 2020, and Council will confirm the best practicable option in late 2020. A new discharge permit will be applied for by June 2022.

Background information

The six shortlisted options are (in no particular order):

- Discharging all of the city's treated wastewater to the Manawatū River at the current Tōtara Road Wastewater Treatment Plant discharge point. The wastewater would be treated to a higher standard than that achieved through the current wastewater treatment plant.
- Discharging treated wastewater to the Manawatū River at the current Tōtara Road Wastewater Treatment Plant location when the river is in high flow, and at a new discharge point south of Opiki Bridge when river flows are lower. Some wastewater would be applied to land when flows in the Manawatū River are at their lowest.
- Applying treated wastewater to land, with discharges to the Manawatū River in exceptional circumstances.
- Applying treated wastewater to land, with discharges to the Manawatū River when the river flow rises above intermediate levels.
- Applying some of the city's dry weather wastewater to land, with the remainder being discharged to groundwater via high rate infiltration (soakage) through the ground surface. Further assessment will consider whether some wastewater should be discharged to the Manawatū River when the level of groundwater is very high.
- Discharging most of the city's treated wastewater to the ocean, and applying some to land. This option would require a pipeline and other infrastructure to move the treated wastewater to a coastal discharge point.

Awareness campaign begins for one of Council's biggest projects

Monday February 3 2020

Palmerston North residents will soon be asked to have their say on one of the biggest financial and environmental decisions our city needs to make in the coming years.

Palmerston North City Council's resource consent for how we currently manage, treat and discharge wastewater is ending soon, and we need to apply for a new consent by June 2022.

The Resource Management Act requires us to identify options for how we manage, treat and discharge wastewater in the future. We have shortlisted six options for public consultation. This is likely to begin in March.

We're raising awareness of Nature Calls ahead of the consultation.

In February we are running an awareness campaign in Palmerston North about the project and our wastewater use. This includes a new section on the Council website with project information, a display in Council's customer service centre, posters, a social media campaign, and an open day at the wastewater treatment plant.

Chief Infrastructure Officer Tom Williams says it is vital that residents and ratepayers are aware of this project due to its complexity and potential impacts on rates and the environment.

"Nature Calls is one of the largest projects Palmerston North City Council has undertaken. The outcome will impact rates, so we need to make sure everyone has a say. We're running this awareness campaign so that come consultation, people already have some understanding of the project."

We want residents and ratepayers to make an informed decision.

During the consultation we'll be releasing a lot more information about the shortlist. Many of the hybrid options will give details about how much treated wastewater will be discharged at different sites, and when. We will also share what the technical requirements are to implement each option, how we will ensure they meet environmental and public health regulations, what they mean for Māori, and any social or community impacts.

Tom Williams says we will also give a cost range for each option.

"Improving our wastewater management, treatment and infrastructure won't be cheap. The exact cost of the shortlisted options, as well as funding opportunities from Government, is being explored as part of ongoing investigations into each option. We are committed to ensuring the best practicable option is sustainable, practical and affordable."

Background of Nature Calls

The management of water resources and discharge of wastewater is the joint responsibility of City Council and the Horizons Regional Council. The mechanism we use that allows us to discharge treated wastewater is the resource consent process under the Resource Management Act (RMA).

Our current resource consent was granted in 2003 for 30 years. However, in 2013 Horizons Regional Council became concerned about the increase in algae and sludge downstream from wastewater discharge. We don't want to cause our awa (river) significant harm, so in 2017 we agreed to bring forward our next application for consent to 2022.

The RMA process requires an option that appropriately avoids or mitigates adverse effects on the environment and meets the purpose and principles of the RMA (Part 2). To meet these requirements, we'll investigate, and show proof of, our analysis of

possible options and potential effects on the natural, social, cultural and economic environments. It's essential that we also engage with our community.

In late 2020, Council will choose an option to proceed with and, over the next 18 months, we'll work on the formal resource consent application that includes preparing an Assessment of Environmental Effects. We need to lodge the resource consent application and assessment with Horizons Regional Council before June 2022.

The Horizons Regional Council will assess the application and may approve it, with consent conditions, or decline the application. The consent application will likely be publicly notified.

Once the consent is granted, we will be required to adhere to its conditions. The consent will confirm where the treated wastewater will be discharged to, how much can be discharged, what level of treatment is needed, and monitoring and reporting requirements.

The six shortlisted options are:

- All treated wastewater is discharged to the Manawatū River, with improved removal of phosphorus and nitrogen.
- Treated wastewater discharged to Manawatū River at Tōtara Road, and below Opiki Bridge, with some land application.
- Treated wastewater applied to land, with discharge to the Manawatū River in exceptional circumstances
- Treated wastewater applied to land, with some discharge to the Manawatū River
- Treated wastewater discharged to groundwater via infiltration, with land application in the drier months of the year
- Most of the treated wastewater discharged to the ocean, and some applied to land.

Timeline

- Early 2020: Public consultation
- 2020: Investigation continues for all six options by technical experts
- Late 2020: Recommended option is given to Council for final decision
- 2021-mid 2022: Development of the resource consent application proceeds
- Before June 2022: Submit the resource consent application to Horizons Regional Council

Consultation begins for Nature Calls

Tuesday June 2 2020

Consultation is now open for the biggest environmental and financial decision our city needs to make in the coming years.

Palmerston North residents, and those in surrounding districts, are being asked to have their say on how we manage, treat and discharge our wastewater for up to the next 35 years.

Palmerston North City Council's resource consent for how we currently manage, treat and discharge wastewater is ending soon, and we need to apply for a new consent by June 2022.

The six shortlisted options we want public feedback on involve discharging treated wastewater to a range of environments – the Manawatū River, land, groundwater, and the ocean. Most of the options are also a hybrid – where a combination of discharge locations would be used.

This consultation had been scheduled for the week New Zealand went into Alert Level 4 Lockdown, so was postponed. Due to legislative timeframes, we cannot delay the consultation any more.

This project will impact rates

Before this project started in 2017, a placeholder budget of \$128.8 million was set aside in our 10 Year Plan for a new wastewater solution. After investigating options and doing technical work, we now know that the cost will be far higher.

Currently, residential ratepayers pay \$253 for wastewater services. The potential future cost for these options range from \$550 to \$1,200 per home per year. This charge will also apply per pan (toilet) for other ratepayers.

There'd also be a very significant contribution by our trade waste customers. Around 500 businesses currently pay around \$1million combined per year to send their wastewater to our treatment plant. They will also pay significantly more.

This project is likely to be the single biggest programme to be contemplated by Council next year for our next 10 Year Plan. It will have very significant impacts on our debt levels and the rates income required to not only service and repay the debt, but also to operate the treatment process and discharge. The Council will as part of its decision-making process be faced with prioritising its investments in other facilities and services so that its debt levels do not exceed the limits that will be imposed by its lenders, and rates increases are not higher than ratepayers can afford.

Palmerston North Mayor Grant Smith says, unfortunately, this isn't an optional project.

“Hearing these numbers on the back of Covid-19 will be an understandable shock to our residents. The challenge for us will be to determine the most cost-effective option that strikes an appropriate balance between environmental, cultural, social and financial considerations. I can assure you that government, external and industry funding is being explored, and these conversations will continue as we get closer towards choosing the best option for our city.”

We want people in Horowhenua and Manawatū to have their say too

If we decide to proceed with an option that involves land-based discharge, we'd have to look for land in our neighbouring districts. The average resident creates around 210 litres of wastewater a day, which means for these options we'd need between 400ha to 3,500ha of land. There are some locations in Horowhenua and Manawatū Districts that have the right soil types for land discharge but, as we have not done any field work or testing to prove they'd be suitable, we are not identifying them during this consultation. Once we know what option the public is leaning towards, we will then conduct soil tests and talk to landowners.

Option six also involves an ocean discharge, and this would occur around 2km offshore in the South Taranaki Bight, which is off the coast of Horowhenua/Manawatū.

Mayor Smith says it's important to also hear from residents in this area.

“Ideally, we'd be able to treat and discharge our wastewater within our own boundaries, but the land we need is just too significant. While Palmerston North residents will be paying for this service, we want to make sure Horowhenua and Manawatū residents also get a say, and we urge them to give feedback.”

All options would be sustainable and meet legislative requirements

Our city's population is growing and the value being placed on our environment is high.

We're looking at how we can treat our wastewater better and – if possible – switch from chemical to biological processes for some of these steps.

We're confident that all of the options we're proposing would protect public health. We'll also ensure that any treatment method and discharge meets environmental regulations. We're working with some of the best environmental scientists and engineers to inform us how to achieve these targets.

Coronavirus means we're having to do consultation a bit differently

This is one of the most important decisions our city needs to make, and we want to ensure all our residents understand the project well.

From 4 June, residents will begin receiving a consultation guide in their letterbox with a feedback form that can be posted, dropped into our customer service centre or libraries, or filled in online. This material is also available on naturecalls.nz

If New Zealand remains in Alert Level 2, or drops to Alert Level 1, a 'town hall' style meeting will be held on the evening of Wednesday 17 June, which will also be live-streamed. Under Alert Level 2, we can only have 100 people at a public gathering, so

people will need to register to attend. Drop-in sessions will also be held at community libraries where residents can ask the project manager specific questions. Dates for these are available on naturecalls.nz and will be advertised. If we were to move to Alert Level 3 or Alert Level 4, the 'town hall' style meeting would instead be a live webinar.

Mayor Smith says it's essential for residents to have your say

“While the timing isn't ideal, it is so important that our residents have their say. To be able to make an informed decision we need to know what our residents, ratepayers, neighbouring communities, businesses and different iwi want. This decision will affect us and future generations for up to 35 years. Please make sure your voice is heard.”

Nature Calls consultation extended to 5pm on Friday 10 July

Monday June 29 2020

Residents will now have more time to have their say on the city's biggest financial and environmental decision for many years, with consultation being extended until early July.

Nature Calls is focused on determining the best practicable option for treating the city's wastewater for up to the next 35 years.

Currently, the city's wastewater is treated for around four days before being discharged into the Manawatū River. But our consent is ending soon, and we need to apply for a new one by mid-2022.

Six options for how we could do this in the future are currently being consulted on. Consultation began in early June and was scheduled for the month.

More than 300 submissions have been received so far.

More information to be released

During the consultation, some residents have asked for more information about the environmental impact of the options. The environmental impact won't be fully understood until the treatment level is determined, locations chosen and more scientific

investigations take place. As part of the resource consent application, we'll also be required to undertake an Assessment of Environmental Effects.

At this stage we're working with information we've gathered from expert knowledge, and building on this as we progress through to a preferred option. We are going to do very detailed work next year on the preferred option, which is when we prepare the assessment.

On Thursday night, new information will be added to naturecalls.nz to explain how we narrowed down the selection of potential options from 36 to six.

Palmerston North City Council Chief Infrastructure Officer, Tom Williams says many of the options didn't make it to the consultation stage due to the large costs, or because they wouldn't meet other public health, cultural, environmental or recreational standards. These options were given a fatal flaw status.

"This information may help people understand how we narrowed down the options. We don't expect this additional information will sway people's views, but those who've already made submissions will be able to make a new submission if the information does impact their earlier thoughts. We will be emailing those who've made submissions to let them know about the extra information."

Those who've already made a submission, and want to alter it, are asked to please fill in a new submission form at naturecalls.nz or the written form from the consultation guide which can be found at all the city's libraries, or our customer service centre. When the new submission is received we will be able to update the feedback.

Consultation extended

The consultation was scheduled to end at 5pm on 30 June, but we're now extending that until 5pm on Friday 10 July.

Mr Williams says this is because it's the most important project we need our residents to have their say on.

"We need to get as much feedback as possible, and we are aware some residents have not received consultation material in their letterboxes. That has been remedied, with most homes now having received consultation material over the past few days."

The consultation material is all online at naturecalls.nz and at all of our public libraries. People can also ring the council call centre to request a consultation guide and it will be hand-delivered.

Additional meetings to be held

Two additional drop-in sessions will be held on Saturday 4 July to allow people to talk to the project team one-on-one. The team will be at the Ashhurst Library from 10am to 11am and then the Central Library from 11.30am to 12.30pm. Ashhurst is having a second drop-in session as that is the area most affected by not getting consultation material.

An option will be selected later in the year

In early August we will let residents know the key findings of the consultation. This information will be on naturecalls.nz, Council's Facebook page, released to media, and emailed to everyone who makes a submission.

In December, the consultation feedback will be presented to Council alongside technical reports focused on a range of environmental, social, economic and cultural factors. Elected members will then choose which option to proceed with for a resource consent.

Nature Calls consultation update

Wednesday December 23 2020

A process is now underway to further refine the shortlisted options for how we treat and discharge wastewater in the future.

With our current resource consent ending soon, our Nature Calls project is determining the best practicable option for how we manage our wastewater for the next 35 years.

It will be the largest financial and environmental decision our city needs to make for many years.

More than 1100 people had their say in mid-2020, with both full land and full river discharges receiving almost identical levels of support.

Recent scientific and technical reports have provided more insight into our options

The information that formed our public consultation was provided at the end of 2019 so consultation could occur in March, however Covid-19 meant that consultation could not occur until June and July of this year. We based our consultation on the information we had available, which at that time was mostly conceptual.

Over the course of this year, Council's experts have moved from conceptual level detail to a more technical understanding of the details behind each option. This work includes investigations that explore proposed treatment options and applying these to each of the options to determine preliminary effects on water quality and land based discharges, at desktop level only. This information was used to determine if we can meet water quality targets under the One Plan and resulted in a more refined set of options that include a river discharge.

The nature of the wetland and land passage components has been developed, as well as desktop analysis of the coastal conditions an outfall pipe could be located. Land

application elements were explored at desktop level to determine how we could meet One Plan targets for nitrogen and leaching rates and refinement of the total land areas required. We have also initiated testing of wastewater arriving at and leaving the current plant to understand specific contaminants and how effectively they are removed e.g. emerging organic contaminants. This information will be valuable for refining the treatment component of which ever option or options is preferred.

Planned new environmental policy and legislation changes at a national and regional level will have an impact on each of our shortlist options, especially when discharging to the river.

To understand how we might meet future requirements, we have used advanced modelling tools to determine the potential effects of treatment levels and volumes of wastewater on periphyton growth in the river. The outcomes of the modelling confirm there are limited options we can consider that will meet these targets. Options with limited discharge to the river and substantial land based discharge are more likely to meet these targets in the river.

We've prepared a more detailed factsheet on the health of the river:

- [River health](#)815KB pdf

A refined shortlist

We've continued to undertake technical investigations and have refined the shortlisted options. The options continue to include a river discharge, varying combinations of land and river discharges, and ocean discharges.

River discharge

- A river discharge all the time, with improved treatment to what we currently do
- A river discharge with improved treatment to what we currently do, and a small percentage discharged to land in low river flow

River discharge

- Two river discharges, one at the existing treatment plant and a second below Opiki Bridge. Both with improved treatment, and a small percentage to land during summer low river periods.

Mostly land discharge

- 97% to an inland land application site, and a river discharge in exceptional circumstances
- 97% applied to a coastal land application site, and a river discharge in exceptional circumstances

Exceptional circumstances account for around 10 days of the year during very heavy rain.

Combined land and river discharges

- 45% applied to an inland land application site, and a river discharge for the remainder of the time
- 45% applied to a coastal land application site, and a river discharge for the remainder of the time
- 55% applied to an inland land application site and a river discharge the remainder of the time
- 45% applied to a coastal land application site and a river discharge the remainder of the time

Ocean discharge

- Ocean discharge, with a small percentage to land
- Full ocean discharge that can potentially accommodate the wastewater of our neighbouring councils

While an ocean discharge wasn't as supported as the river or land-based options during consultation, we would like to further investigate the merits of a regional scheme that neighbouring councils could take part in in future years. The ocean option is most feasible to accommodate wastewater from our neighbouring councils or major industry. With recent progress with the government's Three Waters Agency, and a likelihood of there being a regional water agency, we also believe it is something that should be investigated thoroughly.

The public consultation found that there was little public appetite for a discharge to groundwater. The investigations we have carried out have also identified that there are large land areas required and very high treatment levels needed to achieve one plan requirements. Therefore, very high costs have been confirmed for this option. For these reasons, that option has been fatally flawed and removed from the assessment process.

- [Shortlist feedback](#) 1.3MB pdf

Refining the shortlist involves many experts and stakeholder input

We're assessing the options through a number of evaluations, one of which includes assessing each of the options within a Multi-Criteria Analysis (MCA) process. An MCA is used in large scale and complex infrastructure projects in New Zealand and has been tested in the Environment Court. This process provides a systematic way of comparing options using a range of qualitative and quantitative measures. The initial workshops have been held with a wide variety of stakeholders, iwi, councillors and our technical experts.

In addition to the MCA, we're also assessing the options through the lens of iwi in the region and are working with various hapu to determine what this looks like. We will also assess the options against our eco-city strategy, environmental policy legislation and the project objectives.

Public consultation to occur in 2021

The MCA process is helping us narrow down the options and enables Council to bring selected options to you for consideration in a second round of public consultation in early 2021.

Later next year, Council will choose the best practicable option to proceed with.

Once that decision is made, a resource consent application will be prepared and lodged before June 2022.

This process must continue, despite recent developments with the government's Three Waters Reform and the consideration of a new agency or regional agencies that would take control of drinking water and wastewater. As nothing has been confirmed, nor timeframes set, we need to continue to work on our resource consent application to ensure we meet our legal obligations.

Nature Calls open for feedback

Wednesday April 14 2021

Palmerston North residents, and those in surrounding districts, are being asked to have their say on how we manage, treat and discharge our wastewater for up to the next 35 years.

Our resource consent for how we currently do this is ending soon, and we need to apply for a new consent by June 2022.

A second period for feedback on Nature Calls is now open, and will assist Council with choosing a Best Practicable Option in the coming months.

A range of options to consider

Since the feedback in 2020, we've moved from a conceptual level to a more detailed understanding of options. This work has included investigations to explore proposed treatment, modelling the effects of a discharge on the receiving environment, the nature of a land passage or wetland, the impact of residential and trade waste growth under a number of scenarios, along with exploring the potential for a regional scheme. These desktop exercises have also allowed us to determine which options will meet legislative and environmental standards under the Resource Management Act and One Plan.

We've also worked with stakeholders and completed a multi-criteria process to try to identify if any of the options are to be preferred. Based on the work completed to date we have identified three options which appear to score well across the range of criteria, however all options remain under consideration. The three options include:

Discharge Option 1: Majority of treated wastewater is discharged to the Manawatū River via a wetland or land passage, with significantly improved removal of contaminants

(including phosphorus and nitrogen) and some land application during the summer months.

Discharge Option 2: Hybrid Discharge, with treated wastewater discharged to land 55 % of the time, and the Manawatū River 45% of the time

Discharge Option 3: Treated wastewater discharged to the ocean.

Since 2020, we've ruled out the Groundwater Discharge option. Discharge to groundwater requires significant land area and treatment, presenting major cost implications higher than originally estimated at a concept level. There are also environmental risks around an option of this scale, including the potential impacts on groundwater supplies.

The discharge of treated wastewater completely to land is looking less feasible due to the large land area needed and the potential effects this option could have on community, individuals and activities already occurring in the region – eg: farming. The land required is bigger than the city's urban boundary and to acquire that level of land would be complex, and would also take away land for housing or agricultural purposes.

Values a key part of consultation

In this feedback period, we're asking submitters to identify their values in the order of what matters most to them and how these can be met with the options presented.

Mayor Grant Smith says knowing what is most important to the community can input into the decision making process, before the decision is made by Council.

"The values being asked about include public health, Maori cultural values, financial implications, natural environment, resilience, growth and economic development, social and community considerations and technology and infrastructure. All of these values factor into the final decision making, but getting a good grasp of what matters to our community can help shape that decision."

This project will impact rates

Residential ratepayers will be paying \$299 in 2020/21 for wastewater services. The potential future cost for these options range from \$330-450 more per home per year. This charge will also apply per pan (toilet) for other ratepayers.

There'd also be a significant contribution by our trade waste customers. Around 500 businesses currently pay around \$1million combined per year to send their wastewater to our treatment plant. This will also increase.

Palmerston North City Mayor Grant Smith says unfortunately, this isn't an optional project.

"The challenge for us will be to determine the most cost-effective option that strikes an appropriate balance between environmental, cultural, social and financial considerations. I can assure you that government, external and industry funding is being

explored, and these conversations will continue as we get closer towards choosing the best option for our city.”

Plenty of opportunities to ask questions

Over the feedback period we'll have a range of ways for people to have their say, and ask questions. We'll have a series of drop in sessions where residents can come and speak to the project team, a series of public meetings in Palmerston North and Horowhenua, a live Q+A on Facebook and YouTube, and we'll be at some markets around the city. These events will adhere to Covid-19 Alert Level regulations. Dates for these can be found at naturecalls.nz.

We also have a Social Pinpoint page where residents can discuss the values with each other.

The information document and feedback form will be available at all libraries in the city, our customer service centre, and on our website.

The feedback period ends at 5pm on Sunday 9 May.

NZ's highest treatment for city wastewater confirmed

Thursday September 16 2021

Palmerston North City Council has confirmed the 'best practicable option' for managing, treating and discharging the city's wastewater for the next 30 to 50 years.

The selected option will see treated wastewater discharged to both land and river.

Three quarters of the time the treated wastewater will be discharged to the Manawatū River. During the remainder of the time, the discharge of wastewater reduces to the river by 75% and this highly treated wastewater is then used to irrigate crops.

We will also look at diverting a higher proportion from the river over the lifespan of the consent.

The wastewater would also have the best treatment currently available in New Zealand, just one treatment stage down from being drinkable.

Currently the city's wastewater, which is all water that goes down a pipe inside your home or business, is discharged following treatment to the Manawatū River.

Our current consents end in June 2028, however following a consent review 8 years ago Council agreed to bring forward the date for applying for new consents to June 2022.

Before that date we need to apply for new consents with our regulator, Horizons Regional Council.

Best practicable option specifics to be confirmed over the next year

Our proposed future management includes discharging to the river approximately three-quarters of the time (based on river flows).

During the remainder of the time, the discharge of wastewater reduces to the river by 75% and this highly treated wastewater is used to irrigate crops. The land discharge will occur all the time when the river flow is below half median, or a flow of 37 cumecs.

City Mayor Grant Smith says Council yesterday voted to cap the amount at 760 hectares of land to give communities some certainty over the amount of land needed. This gives farming, businesses and land owners some surety for their ongoing infrastructure investments.

“We estimate that we will need 760ha of land for irrigation, including buffer zones, within 30 years – when flows are expected to be 35% greater than today. We can plan for growth without changing all the land use on day one. While we will only be discharging to the land some of the time, the irrigation area, once developed, will be 250-plus hectares larger than any existing land treatment site currently in New Zealand, and with the highest treatment. Over the next 9 months we will be able to confirm we have the right amount of land required.”

Although we hope the area and type of land needed can be located within the Palmerston North city boundaries and Rangitāne rohe, there is a chance we may need to look at land outside of Palmerston North. We have involved the Horowhenua and Manawatū communities in this project over the past 2 years due to the potential of any of the options affecting their region by river, ocean, or land.

Mayor Smith says Council’s preferred approach to acquiring the land will be on a ‘willing buyer, willing seller’ basis.

“Throughout this process, we will work closely with potentially affected landowners.”

The chosen option has indicative capital costs of \$426 million dollars and annual operational costs of \$7million dollars. We will have a better idea of the exact costs, and impact on ratepayers once the consent application and assessment of environmental effects have been completed and lodged with Horizons’ Regional Council.

Best practicable option was one of the highest scorings in all assessments

Council reviewed more than 800 pages of reports to come to the decision, which is the best practicable option according to the criteria in our current consent. The reports included summaries of public feedback, cost assessments, Māori values, Resource

Management Act planning assessments, an assessment of the options against Council's Eco City Strategy and the multi-criteria analysis – undertaken earlier in the project to compare options across a range of factors such as cost, public health, environmental impact, cultural values, social and recreation values, infrastructure complexity and resilience, and the ability to provide for growth.

From the technical experts' overall BPO assessment, this was the second recommended option as the BPO. The first recommended option was full discharge to the ocean, but this was not recommended as the BPO as it is completely unacceptable to the community, and also to iwi. These views were given weight as, in determining the BPO, the Council is required to have regard to both adverse effects on the environment, including on cultural values, and take into account Part 2 of the RMA, which includes consideration of the principles of the Treaty of Waitangi.

Extensive community engagement will continue during the next stages

Over the last 3 years community and stakeholder groups in Palmerston North, Horowhenua and the wider Manawatū region have been invited to provide feedback to Council. This has included three rounds of community engagement between 2019 and 2021.

Mayor Smith says Rangitāne o Manawatū, as mana whenua in Palmerston North and part of the project's steering group, have worked closely with Council officers and elected members at both governance and technical levels of the project.

“Engagement with iwi throughout the wider Horowhenua and Manawatū region has also occurred, and significant effort has been made by iwi to incorporate their values into the options assessment and selection process. We will continue to work closely with regional iwi over the coming year to refine and confirm the details of the option and to assess the likely environmental effects as part of developing the consent application.”

Council voted to agree a project partnership or governance group to establish an adaptive management strategy to define the resource consent, which would include mana whenua Rangitāne and river iwi.

Role of Three Waters on Nature Calls

The government is proposing that water be managed by four regional entities across the country, with a final government decision pending in the next few months.

Council sought legal advice about whether we should proceed with selecting an option and preparing and lodging the consent applications, given the possibility that any new consents would become the responsibility of the new organisation to implement and manage. The advice recommended we proceed as planned given that the Three Waters proposal has yet to be confirmed, and even if implemented will not override our current legal obligations.

Updates will be provided at key points of the project

Over the coming year, we will continue to provide updates about this project at naturecalls.nz

Best practicable option background

Our BPO sees us removing more treated wastewater from the Manawatū River. We will also look at diverting a higher proportion from the river over the lifespan of the consent.

The option includes discharging to the river approximately three-quarters of the time (based on river flows).

During the remainder of the time, the discharge of wastewater reduces to the river by 75% and this highly treated wastewater is then used to irrigate crops.

While 'cut and carry' pasture has been assumed in the option proposed, the detail of the crop or crop varieties that will be grown will be clarified during the consent phase over the coming year.

The land discharge will occur all the time when the river flow is below half median, or a flow of 37 cumecs. Irrigating land at this time when soils are drier and crops are growing vigorously will ensure most of the highly treated wastewater and nutrients are beneficially used by the crop, and not lost to groundwater or overland flow. It also means the river will be better able to disperse and dilute the water when we discharge into it.

Over the next year we will be confirming the river and irrigation modelling work and carry out further river monitoring and soil testing.

The option will require soil with good drainage qualities to prevent ponding of treated wastewater. We have not yet identified specific land areas, but these will be selected on a range of factors, including facilitating efficient irrigation operation and land management, limiting the impact on sensitive environments, and minimising the number of landowners affected.

A further agreement under adaptive management was voted on, to engage other reuse and diversion options, to further divert more wastewater from the river in the future. These options could include: repairing infiltration to the city's stormwater network, encouraging more primary treatment of trade waste, developing and recharging wetlands, considering the potential of irrigating on Council reserves, golf courses and race tracks, as well as reducing domestic water use.

The final consent application will identify some of these further diversion and reuse opportunities, and others will be added over the lifespan of the consent as new technologies become available and regulations change.

An adaptive management strategy will be developed and form part of our consent application. This means Council and key stakeholders will work together throughout the development of the consent to ensure the best results for our discharge environments,

and will plan to take into account new technology and other reuse and diversion of wastewater options.