

# South-west Wastewater Treatment Plant answers to your questions



June 2023



## South-west Discharge Consent

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### How do we get copies of the reports?

All documents relating to the 2018 South-west discharge consent are on the Watercare South-west Project Page – [www.watercare.co.nz/southwestwastewater](http://www.watercare.co.nz/southwestwastewater). The documents include:

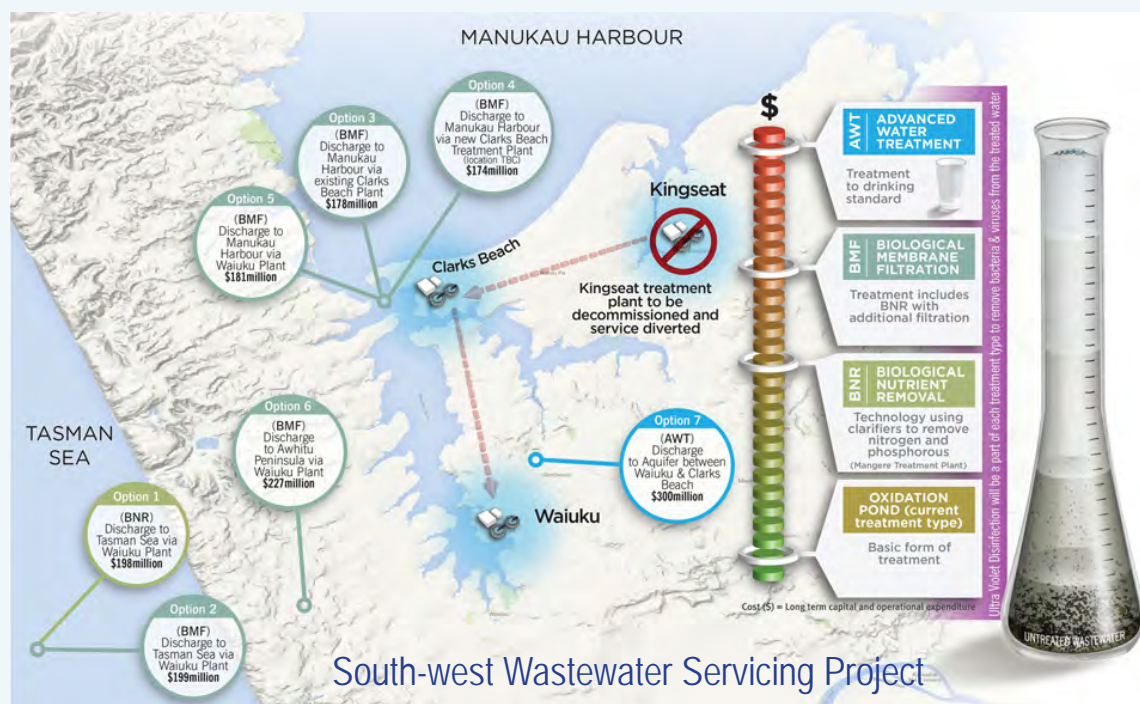
- Consent order
- Auckland Council Decision
- Assessment of Environment Effects Report
- Receiving Environment Report
- Hydrodynamic modelling of the Discharge Consent
- Assessment of Alternative Report
- Environment Court Decision.

Additionally, this link will have all the documents presented to the community and will be regularly updated with new information.

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### Why is the discharge at Clarks Beach and not to the Tasman as it would be simple to thrust across the river to Āwhitu Peninsula?

An Assessment of Alternatives Report for the discharge consent was prepared in 2016 which identified a long list of approximately 137 options with different discharge locations, treatment technology and treatment plant locations. This was reduced to a short list of 34 options. This list was narrowed down to seven options for detailed analysis. Two of these options were in the Tasman Sea (refer to map below).





The Tasman Sea options was not advanced due to:

- Difficult and complex nature of constructing an outfall in a highly dynamic coastal environment.
- Would preclude beneficial reuse options in the future.
- While the Tasman Sea option provided high dilution for the treated effluent, some community feedback and the majority of iwi wanted the restoration of the Manukau Harbour through a higher quality treatment, and a Tasman Sea discharge option was seen by some as shifting contaminant loads to another location.

This report can be found on the Watercare South-west Project Page.

### **3 When was the Discharge Consent granted and why were we not advised to oppose?**

The discharge consent project was initiated in mid-2015 with an application to Auckland lodged in June 2016. Community consultation was undertaken through each stage of optioneering with both the Clarks Beach, Kingseat, Glenbrook and Waiuku communities. Watercare requested Auckland Council to publicly notify the application. A total of 21 submissions were received with 16 parties wishing to be heard at Hearing. A hearing was held in August 2017 with the decision to grant the application released in December 2017. The Manukau Harbour Restoration Society (MHRS) appealed the Council decision to the Environment Court. Watercare and MHRS undertook court assisted mediation in February 2018. Both parties reached agreement on conditions with a consent order issued by the Environment Court in June 2018.

### **4 What are the expected impacts on the Manukau Harbour and the sea life? How will the discharge be managed to reduce impacts on the community and beach?**

As part of the 2016 resource consent application to Auckland Council, Watercare submitted a range of technical studies in support of the application. These included environmental and public health studies which concluded the proposal would result in a low environmental and public health effects. These can be found on the Watercare South-west Project Page – [www.watercare.co.nz/southwestwastewater](http://www.watercare.co.nz/southwestwastewater). The wastewater will be treated to a high quality and discharged 100 metres off the 12<sup>th</sup> green at the Clarks Beach Golf Course. The treated effluent will be discharge on the outgoing tide. The consent is subject to conditions requiring annual reporting of the discharge performance; five yearly environmental reporting and a technology review.

### **5 How do we know that the discharge is not killing the harbour?**

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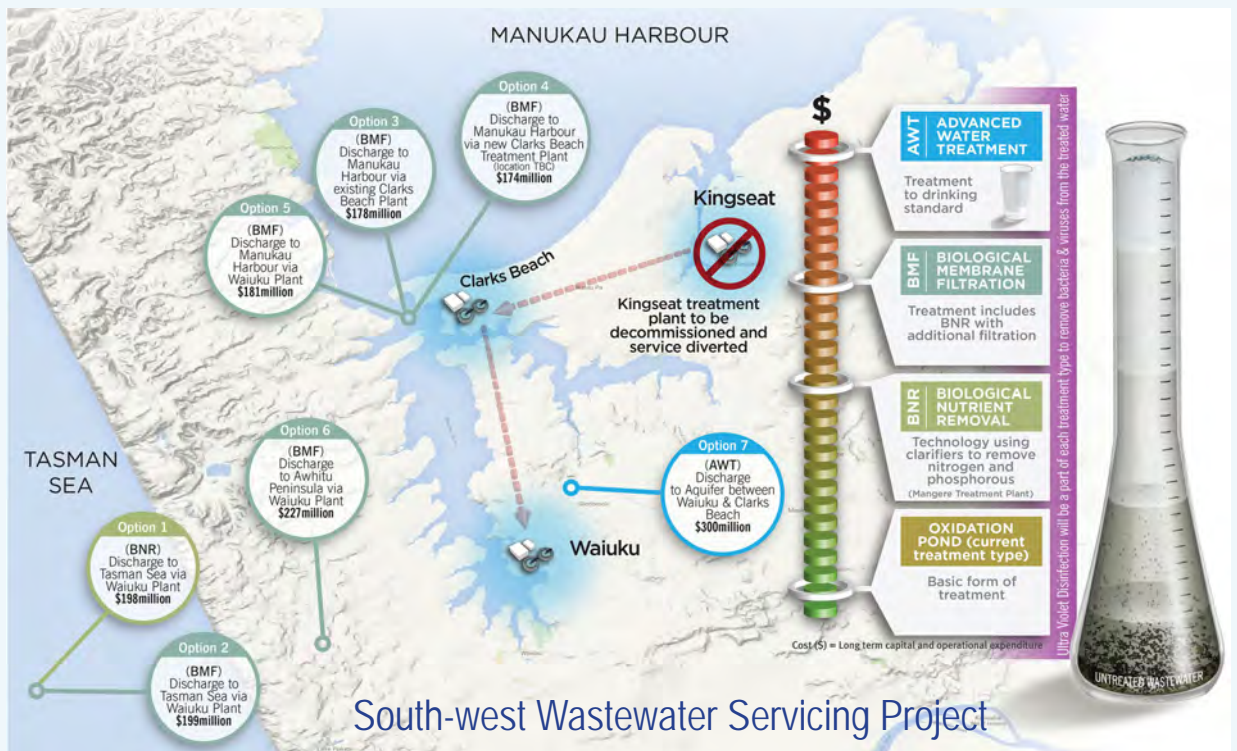
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**6 Can the current location still have an outfall to the Tasman Sea?**

Watercare is committed to the outcome of the 2018 discharge consent. The granted consent requires a high-quality treatment of effluent prior to release approximately 100 metres off the coast of the 12<sup>th</sup> green at the Clarks Beach Golf Course. The discharge is only allowed on the outgoing tide.

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**7 If Watercare are unable to meet the discharge consent deadline, what happens next? Does the discharge consent process re-set and start from scratch?**

Watercare is committed to the outcome of the 2018 discharge consent. Our current programme confirms that we can achieve the outcomes of the discharge consent within the timeframes in the consent.





## Existing Waiuku Wastewater Treatment Plant (WWTP) site

### 8 Why was Site Z (Waiuku WWTP) discounted as the most appropriate site for the new WWTP?

A scheme with the WWTP located at the existing Waiuku site would require a pipeline conveying untreated effluent from the communities of Kingseat, Clarks Beach and Glenbrook Beach. A return treated effluent pipeline would be required to connect the WWTP with the final discharge location approximately 100 metres off the coast of the 12<sup>th</sup> green at the Clarks Beach Golf Course.

- Site Z did not score well on the criteria of wastewater conveyance, construction risk, hydraulic considerations, and capital and operational greenhouse gas emissions.
- This site will require the purchase and designation of additional land from Glenbrook Steel Mill to facilitate the required WWTP construction, while operating the existing Waiuku WWTP.
- This site has the highest construction cost and will result in more GHG emissions compared to Site B (162 Clarks Beach Road) and T (372 Glenbrook Beach Road) due to the need for an additional pipeline between Glenbrook Beach and the Waiuku WWTP site.
- Network design and operation is more complex than Site T (372 Glenbrook Beach Road) or Site B (162 Clarks Beach Road)
- High operational costs particularly without the Kingseat development. Due to the long retention
- Delays installing Phase 1a and having an interim servicing solution. The works on Glenbrook Beach Road will take longer and be more disruptive due to the need to install two pipes in the road corridor. This will also delay completion of Phase 1a. Future growth past 2052 in the North would require an additional pipe in the road corridor.

## Designation Application

### 9 What is the process of applying for and having a designation/resource consent granted and will this be notified consent?

The Notice of Requirement application for the Designation of the WWTP will be lodged with Auckland Council in August this year. Watercare will request Council to publicly notify the application. The application to Auckland Council will consist of an Assessment of Environmental Effects Report, and technical reports including, ecology, odour, traffic, flooding, archaeology, landscape/visual, noise and vibration.

A publicly notified application allows the public to lodge a submission in support, and/or opposition, or to indicate a neutral position with respect to an application. Submitters also have an opportunity to indicate whether wished to be heard at a Council hearing.

### 10 Will we be looking at improving the road – surface, overland flows, alignments

All public roads are owned and managed by Auckland Transport (AT) on behalf of Aucklanders. AT have not indicated any upgrades to the roads in that area.



### 11 Will Watercare be looking at planting prior to construction to improve visual impact?

Watercare is open to suggestions to undertake planting before, during and after the construction phase. Specifically, planting along the road frontage can be possible before the commencement of construction.

### 12 Will Watercare consider compensating land owners for loss of land value due to the plant?

There is little to no evidence that property values will reduce from the proposed WWTP. Watercare has no public works requirements on any other private land.



**13 Why have we chosen the second best option and if Site T is so good, why didn't we go there first?**

The WWTP site selection Options Assessment was carried out between June 2021–December 2022 to determine the most suitable site for a new South-west WWTP. The report concluded that 162 Clarks Beach Road Site (Site B) best met the project criteria and objectives as the most suitable site for a new WWTP. The project progressed with land negotiation and purchase on a willing seller basis. During land negotiation, the Public Works Act process was initiated to undertake onsite assessments to confirm the project requirements for the land acquisition of the whole site.

The negotiations for the site at 162 Clarks Beach Road could not be resolved and there were complexities in acquiring this site. Continuing with the Public Works Act process would be taken approximately 12–18 months to finalise. This would have resulted in significant risk to not been able to deliver the scheme.

As a result, the project team reconsidered the alternate options from the other shortlisted sites for a new WWTP. The proposed Site T (372 Glenbrook Beach Road) was on the shortlist of site. The site is not located on a headland and scored well against a number of considerations including sufficient land area for current and future expansion, odour, amenity, ecology, engineering, operation and maintenance.

**14 What have we done regarding consultation with community?**

Community consultation on the scheme was initiated in 2016 with the development of discharge consent options. The community consultation has continued with the WWTP site selection process. This consultation began with an online MS Teams session in September 2021 and an in-person session in December 2021. These allowed consultation with feedback from the public on long list and short list site options. In addition to that, we presented to the Manukau Harbour Restoration Society (MHRS) in October 2021, we provided regular updates via email, updates to the Watercare South-west Project Page.

**15 What are the planned uses for the pond at the front of the property?**

At this stage the ponds may be retained and used for stormwater retention. The project team are currently developing the concept design with details to be confirmed as the design is further progressed.

**16 Will we be trucking sewerage?**

The new WWTP will cater for the communities for Kingseat, Clarks Beach, Glenbrook Beach and Waiuku. These communities will be connected up to the proposed WWTP via pipelines.

**17 What are the highest structures and how high?**

The project team are currently developing the concept design with details to be confirmed as the design is further progressed. The current zoning allows for buildings of a height of 15 metres.

The proposed treatment plant buildings/structures will be located to the middle of the site. These building/structures will be setback approximately 200 metres from the boundary. The height of buildings/structures will vary across the site with the anticipated height not exceeding the zone standard of 15 metres. Buildings / structures that are processing the wastewater, for example site offices, may be present within the 200 metres from the boundary.

**18 What are the emergency contingency plans for all aspects of the site?**

The scheme employs a number contingency measure to safeguard the community, environment and the facility. This includes buffer storage, permanent onsite generation and installation of standby equipment should there be any equipment failure.

**19 How many trucks will be using Glenbrook Beach Road during construction of the WWTP?**

The project team are currently developing the concept design with details to be confirmed as the design is further progressed. Our recent Snells Algies WWTP project, which is a similar scale project included the following traffic movements:

**Main construction works**

- Between 100 to 150 people (project peak) a day
- Communal parking for 40–60 vehicles onsite, offsite parking 60–80 vehicles. The proposed site would enable all parking to be provided onsite
- Average of 50 people onsite during off-peak period.
- Work hours 7am to 5pm weekday
- Crane(s) on low bed truck
- Delivery trucks 2-4 a day

**20 Will this WWTP result in the paint discolouration and odours experienced in Bromley, Christchurch?**

The issues at Bromley resulted from a fire in a tank filled with plastic media. The new South-west WWTP will use a different treatment process and the tanks will be full with water rather than a plastic media and so the fire risk experienced at Bromley will not be present.

As a result of the fire at the Bromley WWTP high concentrations of hydrogen sulphide were generated onsite. A report indicated that there was some temporary discolouration of paint on nearby houses due to high hydrogen sulphide.

**South-west Phase 1a (Conveyance from Kahawai Point to Waiuku WWTP)****21 Why is the conveyance pipeline not a notifiable consent?**

The conveyance pipeline is being installed early to serve the existing development at Kahawai Point with the existing Waiuku WWTP. The pipeline is future proofed to connect up with the proposed WWTP should the necessary permits be obtained. Future works would be limited to a connection between the proposed WWTP and the conveyance pipeline.

The conveyance pipeline has been lodged with Auckland Council as a non-notified consent. The conveyance pipeline will mainly be within the road corridor and constructed in sections. The nature of the works is common for such types of infrastructure with standard practices for managing traffic and construction works.

**22 Will the community be required to/able to connect to the conveyance pipeline or is it a choice and what will the costs likely to be?**

The granted 2018 discharge consent requires the urban zone land within Kingseat, Clarks Beach, Glenbrook Beach and Waiuku to be connected to the reticulated network. These communities will have their raw effluent piped to the proposed WWTP for treatment. Land zoned as rural will not be required to connect up to the proposed WWTP.

**23 How long will construction take? And, when will it start and end?**

The conveyance pipeline is to serve the existing development at Kahawai Point with the existing Waiuku WWTP. Construction on the conveyance pipeline is planned to commence in January 2024 and completed by June 2025. A total period of 18 months is anticipated. The conveyance pipeline will mainly be within the road corridor and constructed in sections. The nature of the works is common for such types of infrastructure with standard practices for managing traffic and construction works.

**24 How big is the pipeline and where will it be located?**

The pipeline will be approximately nine kilometres-long, serving the existing development at Kahawai Point with the existing Waiuku WWTP. The pipe will be a maximum width of 600mm (outside diameter).

The conveyance pipeline will mainly be within the road corridor and constructed in sections. Where the pipe is to be within the road corridor, it will be located within the berm where possible, or otherwise underneath a single carriageway lane. The pipeline alignment takes into account existing assets such as the Glenbrook Irrigation Pipeline and overhead power lines.

**25 What will the construction impacts be?**

The conveyance pipeline will mainly be within the road corridor and constructed in sections. The nature of the works is common for such types of infrastructure with standard practices for managing traffic and construction works.

Where the pipeline is within the road corridor there will be temporary traffic impacts with possibly a single lane closure with traffic light control. The pipeline will be installed using a 'rolling site' methodology where the ground is excavated, pipe installed and then progressively backfilled and reinstated. The length of the rolling site will be approximately 200 metres.

There is the potential to use three to four pipeline trenching crews working concurrently on separate segments of the alignment. This can reduce the overall construction duration and limit the impact on the community. Site traffic light systems can be coordinated to allow smooth thoroughfare of traffic. The sequencing can be changed throughout the day to account for different peak traffic periods.

**26 How will safe sightlines be maintained for entry/egress from the road?**

For the conveyance pipeline project, there will be roading management signs and traffic control to indicate construction areas.

For the construction of the proposed WWTP, The project team are currently developing the concept design with details to be confirmed as the design is further progressed. The design will consider the need for wide ingress and egress crossings. These will be considered as part of the Traffic Impact Assessment which will be provided as part of the designation application.

**27 Will the full road be reinstated?**

Typically, Watercare will reinstate the trench or lane width area of works.

**28 Are there alternative pipe installation methodologies?**

Other pipe installation approaches were evaluated and not considered feasible due to geo-technical risk, duration of disruption, operational hydraulics and cost.



## Consent compliance

### 29 What will we do if there is a non-compliance at the outfall?

The granted 2018 discharge consent sets out the discharge quantity and quality limits. The proposed WWTP will be designed, built and commissioned to meet the consent limits. The proposed treatment will be state of the art with technology that is tried and tested. Similar technology has been applied to our other WWTP such as Pukekohe and Snells Algies.

The scheme employs a number contingency measure to safeguard the community, environment and the facility. This includes buffer storage, permanent onsite generation and installation of standby equipment should there be any equipment failure. These contingencies enable the WWTP to comply with its consent requirements.

## Consent and construction timelines

### 30 Consent and construction timetables

The Notice of Requirement application for the Designation of the WWTP will be lodged with Auckland Council in August this year. Watercare will request Council to publicly notify the application. The application to Auckland Council will consist of an Assessment of Environmental Effects Report, and technical reports including, ecology, odour, traffic, flooding, archaeology, landscape/visual, noise and vibration.

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## Consultation and engagement

### 31 There hasn't been consultation and engagement on this project/proposed site

Community consultation on the scheme was initiated in 2016 with the development of discharge consent options. The community consultation has continued with the WWTP site selection process.

This consultation began with an online MS Teams session in September 2021 and an in-person session in December 2021. These allowed consultation with feedback from the public on long list and short list site options. In addition to that, we presented to the Manukau Harbour Restoration Society (MHRS) in October 2021, we provided regular updates via email, updates to the Watercare South-west Project Page.

The site at 372 Glenbrook Beach Road was identified in long list potential sites as well as short list potential sites. These locations were included in the public consultation asking for community feedback on the site location in September and December 2021 respectively. As soon as Site T – 372 Glenbrook Beach Road was acquired the local board were notified, as were local mana whenua. Adjacent sites were then advised in April 2023 with a notification they could have a one to one conversation in advance of community sessions.

Community consultation will continue through formal process for the Notice of Requirement application. The application will be lodged with Auckland Council in August this year. Watercare will request Council to publicly notify the application. The application to Auckland Council will consist of an Assessment of Environmental Effects Report, and technical reports including, ecology, odour, traffic, flooding, archaeology, landscape/visual, noise and vibration.





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Community engagement is an on-going process and we will continue discussions with the community to provide information and understand concerns. Further community sessions will be held to continue to provide updates.

**32 Will I have an opportunity to give feedback?**

As part of the community engagement process we will be asking for feedback on aspects like plantings, site screening, use of the buffer zone etc.

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