

## Best practicable option... what does that mean and how do we identify it?

In simple terms, the best practicable option (BPO) for the South-West Wastewater Servicing Project means the 'best option'. This would be the wastewater treatment and disposal method that balances a number of objectives, is affordable and protects our communities while also preventing harm to the environment and cultural values.

The process we use to identify the BPO for wastewater servicing in the area is set out in the diagram below:



Waiuku Wastewater Treatment Plant.

### Contact us

For further information to be kept informed or queries regarding the project please contact us on:

Email: [southwest@water.co.nz](mailto:southwest@water.co.nz) Phone: 09 442 2222

Or visit [www.watercare.co.nz](http://www.watercare.co.nz) – 'work in your area'.

### What happens next?

The team is researching the five feasible options and would like to share these with the community in early 2016. We will be holding a series of information sessions for you to provide your feedback. We also welcome feedback at any stage of the project and further details will be provided on the information sessions in our next flyer.

We are looking for the following feedback:

- Do you think there are any other options for discharging treated wastewater, or any receiving environments we have not thought of?
- Have you ever thought about wastewater re-use in your community? How do you think it could work? Do you like the idea?
- Are any of the receiving environments more important to you?
- Do you use the Manukau Harbour and/or the Tasman Sea for recreation or food gathering? Are there any areas you are particularly concerned about?

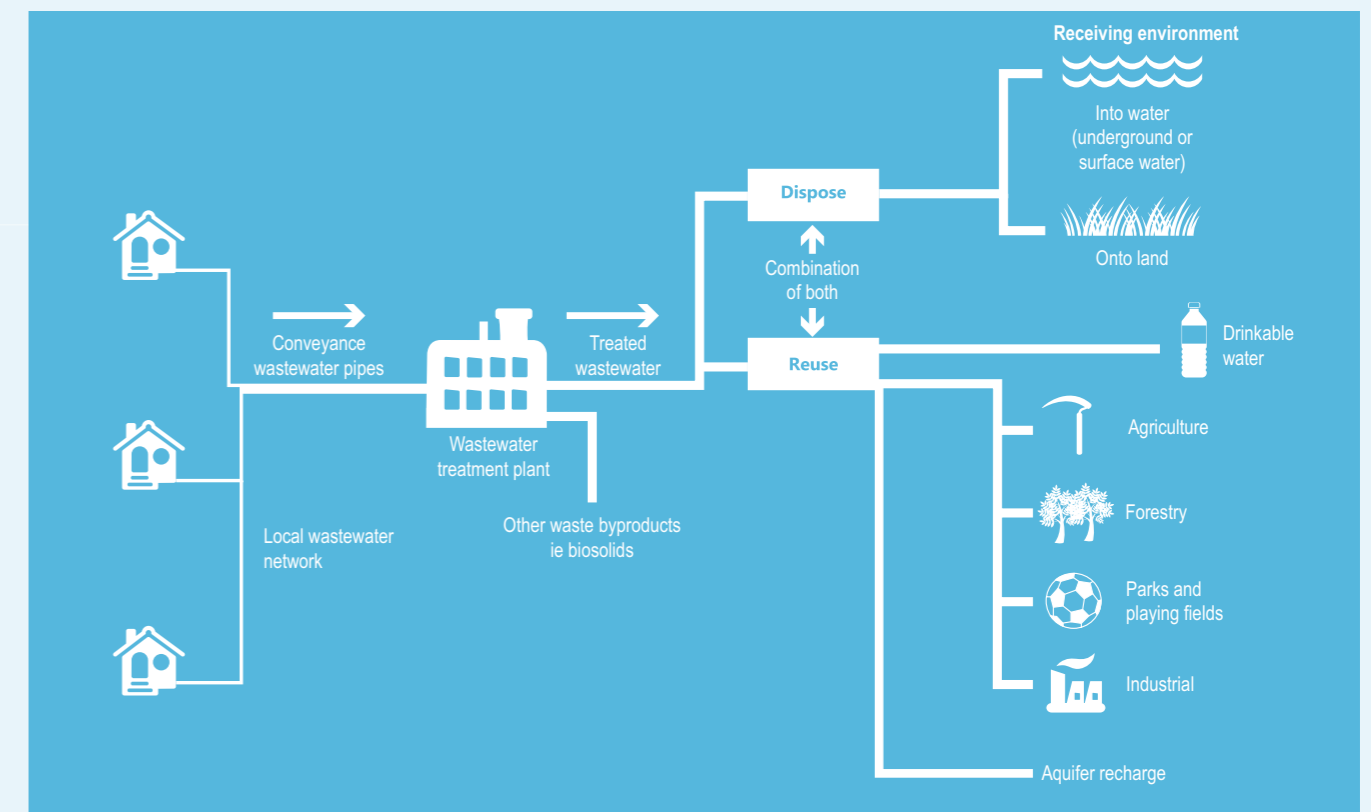


An update on the...

# South-West Wastewater Servicing Project

Work is underway to identify options for managing wastewater from the growing communities in Kingseat, Clarks Beach, Glenbrook and Waiuku. This newsletter provides an update on what we have been up to, a brief outlook at next year's activities and when we will be seeking community feedback.

## How could wastewater from this area be managed in the future?



To come up with a list of potential options to manage the wastewater in the south-west area, we need to think carefully about the key elements of a wastewater system, which are shown in the diagram above:

- The 'receiving environment' – this is the technical name for the place where treated wastewater is discharged to. There are several different options of where the treated wastewater could go, for example, to a river or the marine environment, to groundwater (aquifer), industrial processes or even drinking water! There are examples of most of these types of discharges around New Zealand.
- The wastewater treatment plant – this is the facility where wastewater from the community (including houses, schools, businesses and industry) is treated to remove contaminants before it is ready for re-use or discharge to the receiving environment.
- Local network and conveyance pipes are also part of the wastewater system, and will be addressed at a later stage of the project.

### The receiving environment

The receiving environment where the wastewater is discharged has a big influence on the type of wastewater treatment plant that needs to be used. This is because the plant must be designed to treat the wastewater to a level that minimises effects on the receiving environment – and some are much more sensitive than others. Modern treatment facilities can be designed to achieve almost any level of contaminant removal, but in general the higher the level of treatment, the greater the cost and use of resources. Choosing the best receiving environment for a wastewater system is one of the most important decisions that needs to be made.

### What receiving environments are being looked at?

So far, we have put together a ‘list of disposal options’ that focuses on how and where the wastewater can be re-used or disposed. There are seven options, each with a number of variations, for example where the wastewater treatment plant could be located. From this list, we have ruled out those options that have a ‘fatal flaw’ and therefore excluded from further assessment.

### Project overview

The South-West Wastewater Servicing Project will look at the different ways we might be able to handle and treat the extra wastewater generated from growing communities in the Kingseat, Clarks Beach, Glenbrook Beach and Waiuku areas. We’ll also be taking into consideration how the growth in the other areas of Franklin (for example Pukekohe) may need to be accounted for, but at the moment our focus will be on providing wastewater services to the communities mentioned above.

This project will be looking to identify the ‘best practicable option’ to manage the wastewater generated in these areas. This option will consider and balance environmental, cultural, operational and economic factors.

### List of investigated disposal options:

Disposal option (receiving environment)		Comment
Continue with the existing situation (the status quo)		This option has a fatal flaw as it does not allow for future growth. Watercare is required by law to support Auckland Council’s plans and directions, this option would result in Watercare not carrying out its legal obligations.
Build pipes to pump the wastewater from the south-west area to Mangere Wastewater Treatment Plant		This option is fatally flawed because the wastewater network in south-west Auckland does not have enough capacity to be able to receive additional wastewater. The existing pipes and pump stations must be upgraded or replaced, and this can take a long time. Because of this, Watercare would not be able to carry out its legal obligations within a reasonable timeframe to provide for the anticipated urban growth.
Re-use the treated wastewater		There are many opportunities for re-use. Work will be carried out to identify these and find out how viable they are.
Discharge treated wastewater to groundwater		This approach is used in other countries, but we need to investigate whether this is a possibility in the south-west area.
Discharge treated wastewater to land		There are some smaller communities in New Zealand that dispose of their treated wastewater to land. This option will be investigated to see it is feasible for the south-west area.
Discharge treated wastewater to the Manukau Harbour		This is what is happening right now at three different locations, and we need to consider if this could be a sustainable solution going forward. One discharge location and better treatment of the wastewater will be investigated.
Discharge treated wastewater to the Tasman Sea		Although the Tasman Sea is some distance away, this option will be considered.