

A future direction for Manapouri wastewater

Southland District Council is considering four options for the future of Manapouri's wastewater. While each option ends at the Kepler block for disposal, all have complexities which need taken into account.

OPTIONS

ONE:

- ▶ New treatment membrane-type plant at Manapouri, pumped to Kepler, which utilises the existing pond.

TWO:

- ▶ Raw wastewater is pumped to the Te Anau ponds, with 'lumps' 6mm and over removed. The existing Te Anau system would be utilised to transfer back to Kepler.

THREE:

- ▶ A new treatment system is developed at Manapouri (lower grade than membrane option) with 'lumps' 6mm and over removed. The existing Te Anau system is utilised to transfer back to Kepler and the pond hopefully removed.

FOUR:

- ▶ A new pump station is developed at Manapouri to pump to Kepler. A membrane-type plant is developed at Kepler but treatment waste pumped back to the pond at Manapouri.

It is important to factor various constraints impacting the project into consideration, including the following:

- Fiordland Sewer Options and iwi favour the Kepler for wastewater disposal and support the sub soil drip irrigation (SDI) method. Therefore, wastewater must be to membrane micro filtration quality to meet requirements for particle size to suit SDI irrigation.
- Kepler has the current capacity to handle Te Anau and Manapouri flows without further extension of the current plant but may require expansion once the flow increases due to tourist numbers.
- There is a possibility no discharge consent application will be needed as limits are within current consent conditions.
- Manapouri discharge consent expires December 2023 and an application for extension will be required.
- Land ownership by SDC at Manapouri, View Street and around the wastewater ponds is very limited.
- Current access to the wastewater ponds is limited and not expected to support heavy construction equipment.
- The current wastewater pond is consented to discharge 150m³ per day. This is expected to not be continued within the next consent application.
- The budget is set at \$4 million which is prohibitive.

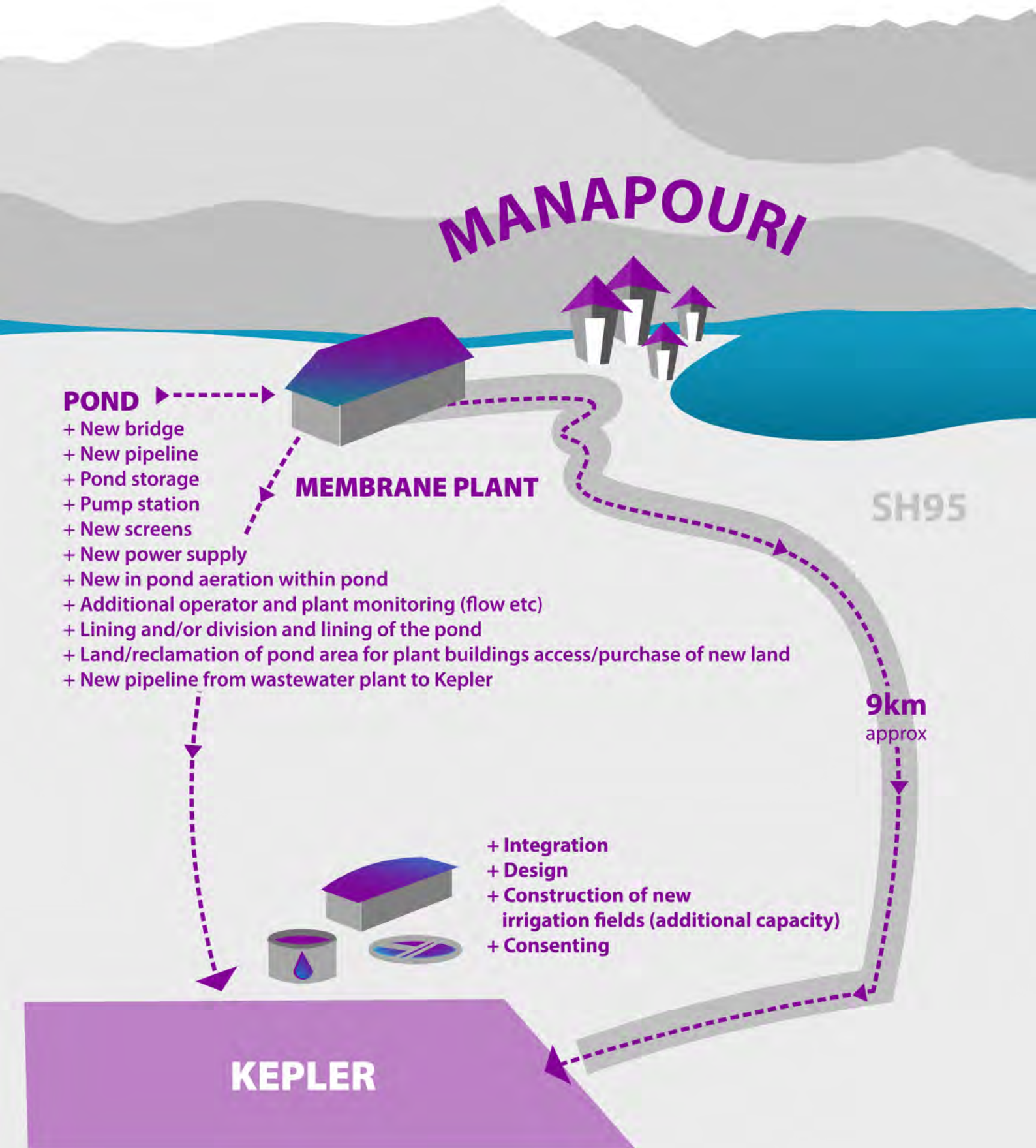
SDC-owned land in Manapouri

This image indicates land owned by Southland District Council in the vicinity of the Manapouri wastewater treatment ponds.



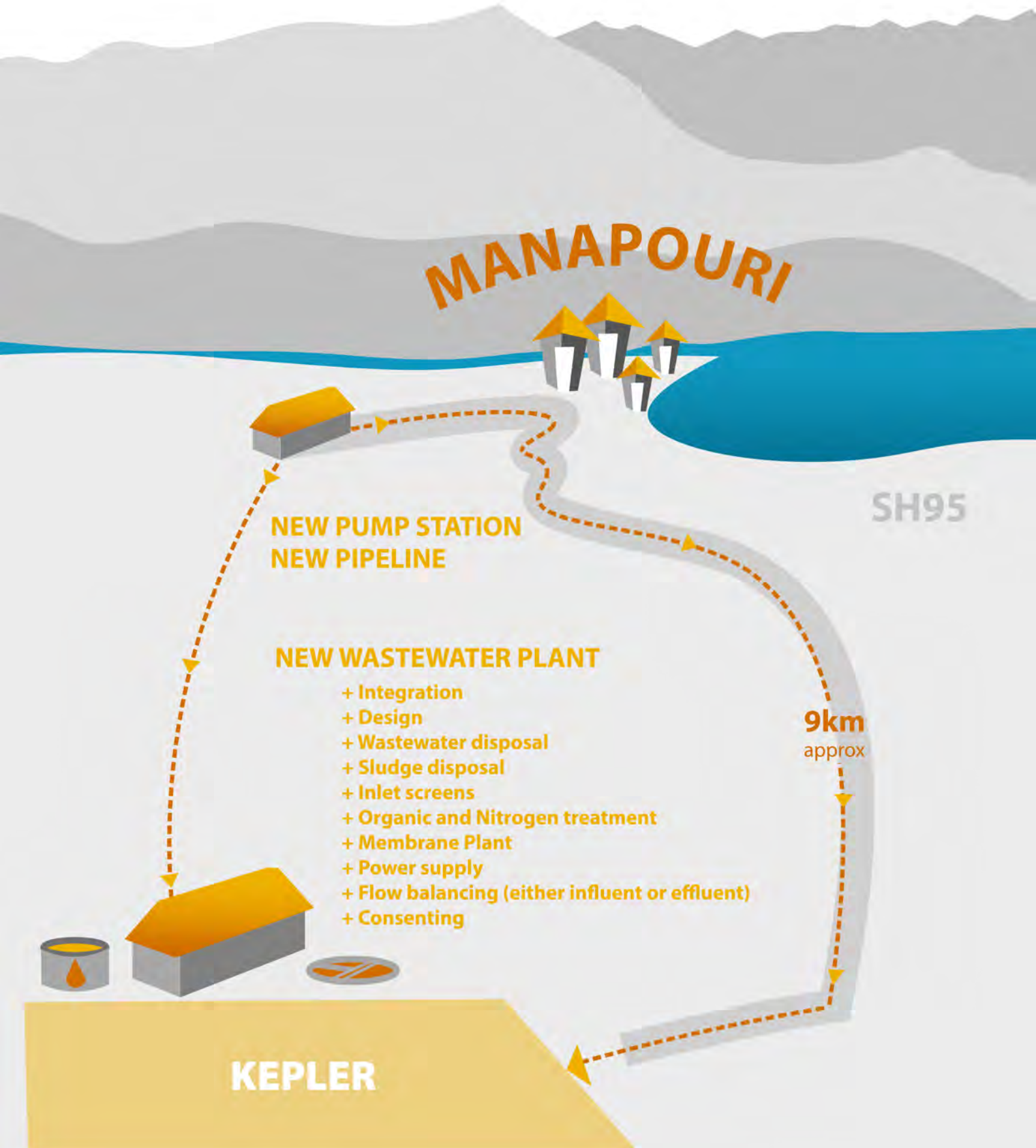
OPTION 1

Upgrades to the Manapouri wastewater treatment plant



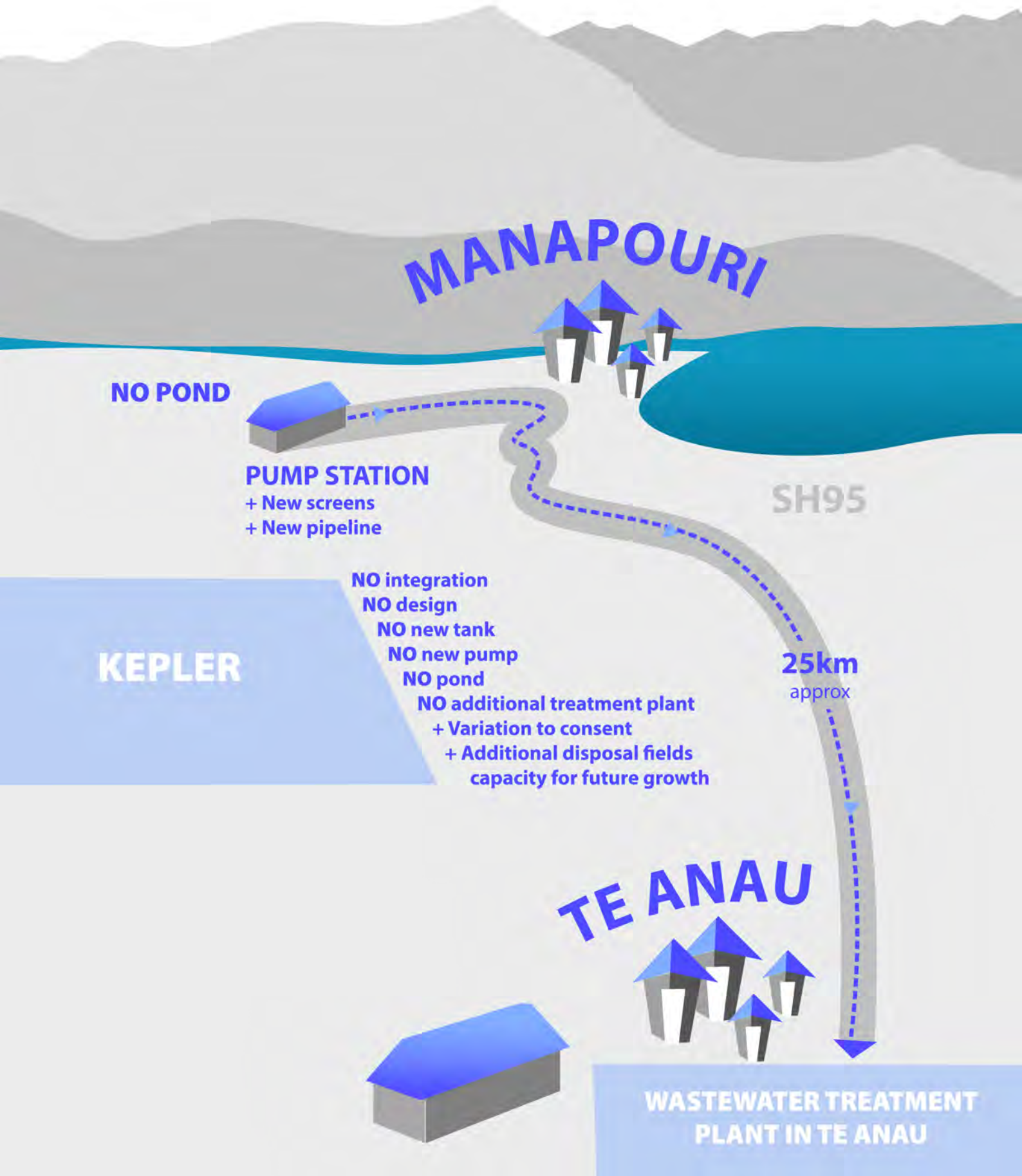
OPTION 2

New wastewater plant at Kepler



OPTION 3

Pump to Te Anau



OPTION 4

Hybrid partially treated wastewater to Te Anau

