

Update on a study of the commercial feasibility of providing water and wastewater services to Scotland Island

## **Background**

Under the Stronger Communities Grants, the State Government provided \$300,000 to Council to assess the commercial feasibility of the provision of water and wastewater services to Scotland Island.

The project commenced in mid-2018 and is on track for completion in early 2020. Pressure System Solutions Pty Ltd was the successful tenderer for the project. The Institute for Sustainable Futures at the University of Technology has been contracted to provide an independent peer review of the project throughout its duration, to provide quality assurance as well as to allay community concerns that the process may produce a biased result.

A Community Working Group was established, including key resident stakeholder groups and representatives to ensure the Scotland Island community understand and support the reports produced by the study. The working group is a consultative body and does not have control over Council and its consultants, nor the study outcomes. Their role is to provide feedback on the project as it progresses, and act as a conduit to the Scotland Island community; sharing information and feeding the community's views back to Council and their consultants.

Council has maintained a Your Say page on Council's community engagement page since the project inception to keep the wider community informed.

## **Project Overview**

The project has three stages: a high level Review of Environmental Factors, an options study, and a commercial feasibility study.

### **1/ High level review of environmental factors (Stage 1A)**

This report identifies the environmental risks and legislation that should be considered in both the feasibility study and in any future proposal to build a scheme on the island.

### **2/ Options report (Stage 1B)**

A longlist of potential servicing options for providing water, wastewater transport and wastewater treatment was assessed for environmental impact, stakeholder and community acceptance, technical risk and work, health and safety considerations.

Following this assessment, a shortlist of two options each for providing potable water, wastewater transport and wastewater treatment was created to take forward to the commercial feasibility assessment.

#### *Water supply options*

C4. A small bore supply connected to the Sydney Water network and providing potable (drinking) water would have two connections to each customer. One connection would go to a low-flow drinking water tap in the kitchen. The second connection would provide an automatic top-up to the rainwater tank.

C6. A direct connection to the Sydney Water network. Rainwater tanks could still be used, but would not be essential.

#### *Wastewater collection and transport options within the island*

A2. A pressure system – where every house has a small fibreglass tank mostly below ground about 2m high by 0.8m wide that contains a grinder pump. When the wastewater reaches the trigger level in the tank, the pump switches on and grinds the wastewater before pushing it out to the piped network.

A4. A hybrid system that makes use of gravity where possible, but relies on a pressure system to move the wastewater to its final destination. Houses would have different systems depending on their location on the island.

#### *Wastewater treatment and disposal options*

B9. Wastewater collected to a treatment plant on the island, with the treated water discharged to Pittwater.

B11. Wastewater collected via a pipeline from Carols Wharf under Pittwater to Church Point, where the wastewater is transported via the Sydney Water system to Warriewood Wastewater Treatment Plant.

Pumping stations may be required on the island for a number of these options.

The report includes concept drawings and the estimated capital costs of the shortlisted options (see summary in Table 1). Total cost for any combination of systems is generally similar unless option B9: On-island treatment system is selected, which has a significantly higher cost to construct than a system that discharges to Sydney Water's system. Indicative capital costs for the construction (but not operation) of the shortlisted options are:

- Water only: either option (C4 or C6) - \$23 million, ~\$61,000 per lot
- Water supply (C4 or C6), with wastewater transport (A2 or A4), and disposal of wastewater to Sydney Water's network (B11): about \$71-73 million, ~\$188,000-194,000 per lot
- Water supply (C4 or C6), with wastewater transport (A2 or A4), with disposal of wastewater to an on-island treatment plant discharging to Pittwater (B9): about \$96 million, ~\$255,000 per lot.

The community working group met in May 2019 to endorse the shortlisted options and a summary of the options was published on Council's Your Say page for the wider community. This update did not include the estimated capital costs and concept plans for the options that are contained in the full report, as they were not ready at the time.

### **3/ Commercial feasibility assessment (Stage 2)**

The commercial feasibility assessment is in progress and will consider the costs and risks associated with operating each of the above shortlisted options. The report for this assessment is expected in early 2020 and will be discussed with the community working group prior to its release.

#### **Next steps**

The final document incorporating all the stage reports will be submitted to Council in mid-2020, with a recommendation to submit them to the State Government for their consideration.