

Small Town Sewerage Scheme

Incorporating whole of water cycle management initiatives

Poowong-Loch-Nyora, South Gippsland, Victoria



Key Messages

- Eliminating the use of onsite septic tanks improved the liveability of Poowong, Loch and Nyora by minimising the risk of household sewage polluting the environment through ageing, failing and poorly maintained septic tanks.
- Using innovative design and delivery resulted in cost savings for both partner organisations.
- Informing and engaging with stakeholders throughout all the stages of the project helped to gain community support.

Project Overview

For South Gippsland Water, providing sewerage services to the rural communities of Poowong, Loch and Nyora has been a journey of challenges, consultation, and adjustment over several years. In the towns, waste from failing household septic tanks was polluting groundwater, waterways and the environment.

In 2013, the cost of South Gippsland Water’s capital works for the Poowong, Loch & Nyora Sewerage Scheme was reviewed by the Essential Services Commission and considered “to be costly” and “further examination of potentially more cost effective options” was requested. In response, South Gippsland Water embarked on a review process to improve the cost benefit ratio of the Poowong, Loch and Nyora Sewerage Scheme.

The review process identified a number of efficiencies that resulted in key changes to the sewerage scheme. These included:

- Construction of a pressure sewer system as opposed to a gravity system;
- Delivery of the project in partnership with South East Water to utilise their expertise and economies of scale;
- Utilising South East Water’s Lang Lang Waste Water Treatment Plant;
- A revised Service Area Strategy;
- Incorporation of Whole of Water Cycle Initiatives.



Installing a pressure sewer system for Poowong Loch & Nyora Sewerage Scheme

Organisations

The project owner and manager was South Gippsland Water, and South East Water delivered the project.

A partnership was developed between the two water corporations to deliver a sewerage scheme for three small townships in South Gippsland. The program maximised economies of scale by utilising South East Water’s technical expertise and the services provided by its Lang Lang Wastewater Treatment Plant.

The Poowong, Loch and Nyora Sewerage Scheme is now operated and maintained by South Gippsland Water.

Objectives

The Poowong, Loch and Nyora Sewerage Scheme is the last of the mandated \$800 owner contribution schemes through the State Government's *Small Towns Water and Sewerage* program for South Gippsland Water.

In the delivery of the partnership program, South Gippsland Water integrated Whole of Water Cycle Management initiatives, which resulted in a water efficiency audit for every household connected and the establishment of a cash back incentive program for water efficient products.

The Poowong, Loch and Nyora Sewerage Scheme eliminated the use of existing onsite septic tanks by providing sewer infrastructure to more than 400 properties. This required the installation of a Pressure Sewer and reticulated sewerage network to service the three towns. A transfer main and three pump stations were also constructed to transfer the wastewater from the towns for treatment at Lang Lang Water Recycling Plant, where it is treated to Class A standard and re-used through South East Water's recycled water network.

Outcomes

- The partnership proved to be the most efficient and cost effective way to address existing public health and environmental issues.
- Substantial cost savings on a \$16M project
- A robust high technology urban sewerage solution.
- Delivery of Whole of Water Cycle Management plans for the townships.
- Transformation of a divided and aggravated community into strong, whole of community support.
- A viable, productive, high quality effluent scheme for the region.
- Growth in South Gippsland Water personnel knowledge and expertise.
- Strong relationships between organisations, at all levels.
- The partnership project was completed on time and budget, and set a new benchmark in wastewater treatment and water efficiency for the region.

"This is a major win for the communities of Poowong, Loch & Nyora. They now have a state-of-the-art sewage system to bolster their towns and benefit the environment"

Lessons Learnt

- South Gippsland Water's identification of the benefits of project partnerships is now part of the Corporation's project development process.
- Beware of the potential for incremental decision making. Be brave and bold, the decision of stepping back to review in order to move forward can be a difficult one, especially for those who have invested considerable resources and time, as well as for the wider community.
- Clearly establish guiding principles and agree to them with stakeholders. These guiding principles must be clear and able to be backed up through science, economics, value proposition, local and wider community, and/or government policy.
- A key component to success is to ensure that the community and stakeholders remain engaged and informed through the various stages of the project. Project guiding principles and demonstrating value of the outcome are key drivers of engagement.

More Information

For more information visit the resource library on the Clearwater website <https://www.clearwatervic.com.au>

Contact

Graeme Watkins | Senior Project Engineer, South Gippsland Water | P.O. Box 102 Foster VIC 3960
P: (03) 5682 0430 | email: gwatkins@sgwater.com.au | www.sgwater.com.au