Bega Valley Shire Council Sewerage Program

In 2003 Bega Valley Shire Council went to tender for the design, supply, construction and operation of sewerage schemes for the towns of Cobargo, Wollumla, Kalaru, Candelo and Wallaga Lake. The Contract was awarded to the Tenix Alliance in a modified alliance and Lump Sum project with a 10 to 15 year operating period, for a value of \$60 million.

Due to the "seachange" growth of new residents and the typical seasonal increases in population over the summer period in coastal regions, much of the shire was at risk of environmental and public health issues caused by the discharge from the residential time bomb know as a septic system.

The Tenix alliance provided council with an innovative design that combined the proven E/One pressure sewerage system with Membrane Bioreactor (MBR) treatment plants to deliver world class facilities for the south coast community. At the time of tender, the combination of pressure sewers and MBR treatment was a world first and the economies provided by this combination of technologies put Tenix in an excellent position to secure the contract.

MBR plants produce outstanding treated water quality and this water can typically be recycled and reused, as is the case in Bega. Unfortunately, the MBR treatment technology is costly and typically forgone for less costly and lower performance treatment systems.

"We chose the E/One pressure sewer technology in this instance as it eliminated the need for 24 pumping stations which would have been required for a gravity system; it has also minimised wet weather infiltration and lowered the risk of overflow," says Warwick Stone, Program Manager.

A major benefit of the sealed E/One pressure sewer systems (when used in conjunction in MBR technology) is the absence of inflow and infiltration of ground and storm water. The virtual elimination

of these flows results in lower and more consistent flows to the treatment plant, representing massive capital savings in construction when compared to a traditional gravity system that typically requires treatment plants be designed for flows equivalent to four to eight times the average dry weather flows.

The towns to be sewered are typical for the area with populations ranging between 200 and 750 people, resulting in the supply of a total of 900+ E/One pressure sewer units.

"The Bega Valley Sewerage Program is delivering excellent results for the Bega Valley Shire Council through the unique combination of E/One pressure sewer technology in conjunction with a Membrane Bioreactor Sewerage Treatment Plant," says Jeff McCarthy, General Manager of Major Projects.



