



# DUNSBOROUGH WASTEWATER TREATMENT SCHEME

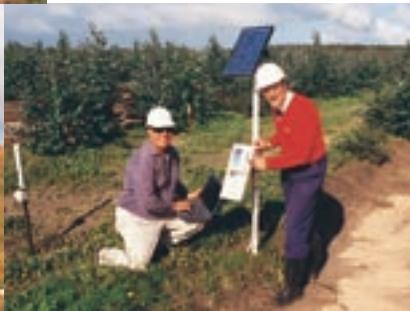
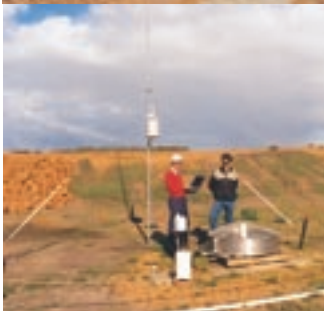
The southwest town of Dunsborough is one of the fastest growing urban communities in Western Australia and has been provided with a state of the art Wastewater Treatment Scheme.

The newly commissioned scheme will enable the sustainable development of Dunsborough to 2040 through the ultimate treatment and disposal of up to 4,000 m<sup>3</sup>/d of wastewater.



This new scheme replaces the old pond-based wastewater treatment plant and will result in a significant reduction in nutrients entering Geopraphe Bay.

It features the latest technology Intermittently Decanted Extended Aeration (IDEA) plant which produces a tertiary treated wastewater, and is used to irrigate a blue gum plantation in the drier months of the year. During four winter months, the treated wastewater is filtered, disinfected with chlorine and released into the Station Gully Drain which runs through the property. The performance of the plant, that was commissioned in May 2000, has surpassed the Water Corporation's expectations.



Tasmanian blue gums were chosen because of their ability to utilise large amounts of water. The plantation will reach maturity within seven years from the time of planting in June 1999. At that time it will be harvested in rotation for woodchips and the process will begin again. The irrigated area will gradually increase from 40ha to 100ha over the next forty years.

The plantation site features a unique subsoil drainage system, as well as a soil moisture monitoring system and integrated weather station that is used to control the irrigation scheme.

The wastewater treatment and reuse scheme adopted reflects the extensive community involvement program held to establish the most acceptable, effective solution to a complex environmental problem. The scheme gives high levels of protection to public health, and ensures environmental sustainability through the next forty years. It provides a valuable drought proof supply of high quality tertiary treated wastewater for reuse and irrigation of woodlots and other worthwhile community projects.

A rigorous performance monitoring and reporting program has been established.

