

Advanced forms of secondary and tertiary treatment will be emphasised, including nutrient reduction, all with highly effective disinfection targeting viral as well as bacterial agents.

The use of retention (maturation) ponds to "naturally" disinfect sewage will decrease as the survival of viruses and odour becomes public concern.

Increased attention will be paid to the exclusion of trade and industrial wastes from the influent stream, and to a reduction of groundwater infiltration into sewers.

The disposal of treated effluent from coastal facilities in areas outside Sydney and Melbourne will use combinations of re-use and ocean outfalls. Such will become the fail-safe option rather than the sole means of disposal.

Objective of this Study

This study, of the situation and prospects in the eastern, coastal States of Queensland, New South Wales and Victoria, which contain much of the 16.7 million population of Australia, has been undertaken to assess the extent to which the evolutionary changes occurring in Australian approaches to wastewater and sewage sludge management are creating potential opportunities for Canadian businesses to provide some of the services, technologies and equipment needed.

Within these States, the areas on which this report concentrates are as follows.

In the State of New South Wales:

metropolitan Sydney, where 97 percent of the 1989 population of 3.7 million was provided with sewerage service by the Water Board;

coastal communities experiencing rapid development growth; south of Sydney, on the Tasman Sea; and north along the coast to the Queensland border.

In the State of Victoria:

Melbourne, where in 1989 the Metropolitan Board of Works was providing sewerage service to 2.5 million people. This number is projected to rise to 3.2 million by the year 2001;

the non-metropolitan communities of the State, where 142 separate water boards supply sewerage services to 2.8 million people.