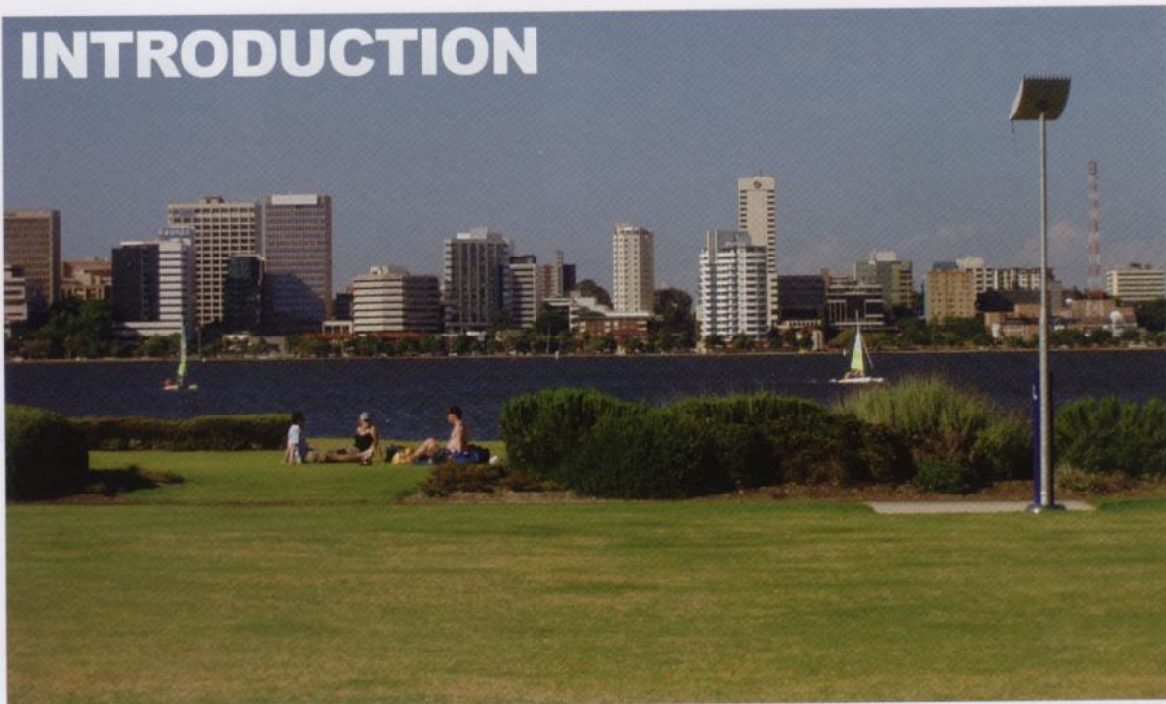


INTRODUCTION



Perth's population has doubled in the last 30 years and now more than 70% of Western Australians live in the metropolitan area. This rapid growth has placed considerable pressure on the natural environment. Climate changes, water conservation and water pollution risks are now important environmental issues faced by turf managers.

Climate change

The south-west of Western Australia has experienced significant climate change since the mid 1970s. Winter rains have decreased by up to 20%, particularly in early winter, with fewer rain days and less rain on wet days. Stream flows have been reduced by 50%, which has had a dramatic effect on inflow into storage dams used to supply scheme water.

Water conservation

With a declining rainfall trend predicted, water conservation is now a major public issue. Recent dry winters have seen dam levels drop below 30% of capacity, resulting in the introduction of stage 4 scheme water restrictions in 2001 and daylight water restrictions for councils.

There also are major concerns for ground water supplies. The Gnangara mound, which is the largest superficial aquifer in the Perth area, has declined significantly due to increased water extraction and the reduced recharge caused by extensive pine plantations.

Groundwater contributes to approximately 60% of Perth's drinking water and also sustains a number of dependent ecosystems on the coastal plain such as wetlands.

Water pollution

Water pollution is another major environmental issue. Recent major algal blooms that resulted in fish deaths in the Swan and Canning rivers have highlighted the problems caused by nutrient leaching and runoff.

Sustainability

Water conservation and pollution are some of the many environmental issues facing the metropolitan area that have raised the community's awareness of the importance of sustainability.

Sustainability is defined as the simultaneous achievement of economic, social, and environmental goals. Our future depends on sustainable policies and practices being implemented by governments, industry and the community.