



The majority of the Perth metropolitan area is situated on the Swan Coastal Plain. This is a narrow strip of land ranging from 15 to 30 km wide, extending from Jurien Bay in the north to Busselton in the south. It lies between the Indian Ocean to the west and Darling Range to the east.

The Perth metropolitan area has developed around the Swan and Canning rivers, which flow only during the winter months due to strong seasonal rainfall, and are tidal almost to the foothills.

The Swan Coastal Plain consists almost entirely of soils deposited by wind and water. The major soil systems have been formed in a pattern roughly parallel to the coastline.

The eastern section of the plain is composed mainly of loamy alluvial material deposited by erosion from the scarp. The central and western areas stretching to the coast comprise a series of sand dune systems.

Most of the soils on the Swan Coastal Plain are relatively infertile, lacking organic matter and essential plant nutrients. The sandy soils also have poor water holding capacity due to the very low clay content and tend to be highly water repellent in the surface layer.

Soil types in the Perth region can be divided into five major systems (*see map opposite*).

- Coastal;
- Western Coastal;
- Central Coastal;
- Eastern Coastal; and
- Foothills, Scarp and Hills.

### COASTAL

This term applies to the entire system of coastal calcareous sand dunes. It is also known as the Quindalup dune system.

These sands originated as sediment on the ocean floor, which were washed onto the beach and then blown inland, forming an extensive system of high, steep-sided dunes.

The Coastal system is typically deep, white sand containing 20–40% fine-grained limestone.



### DID YOU KNOW?

The Swan Coastal Plain began to form when India drifted away from the west coast, 65 to 136 million years ago. The oldest soils lie in the east, while the coastal dunes at Bold Park are only about 6500 years old.