Algal Blooms

Algae are a natural component of a healthy waterway and provide the basis of an aquatic food chain.

Algal blooms often occur when changes in landuse activities result in increased nutrients and a reduction in water quality.

In the Peel Harvey, fishermen first reported an increase in macro algal (seaweed) growth in the 1950s. By the 1960s the stench from rotting algae piled up on the estuary foreshore was causing serious health and social issues for local residents. In 1970 the first microscopic algal bloom was reported in the Serpentine River.

Annual algal bloom cycles continue to plague local waterways.

Algal blooms badly impact on amenity, recreational and wildlife values of the Peel Waterways, as well as pose potential risks to human health.

Thick algal blooms in the Murray River during the summer have been reported since 1995. These blooms have been linked to streaky brown scums that detract from social uses and possibly contribute to fish kill events.

Increases in micro algal blooms such as *Nodularia* have been observed on the Serpentine River since 1970. *Nodularia* blooms in late spring to early autumn and is often followed in cycles by other algal species. Some algae, such as *Nodularia*, can produce toxins harmful to humans and wildlife. Collapsing blooms often deplete the water body of oxygen during decomposition and have been linked to fish deaths on the Serpentine and Murray Rivers and in the Peel Inlet.

Reports of the macro algae *Lyngbya majuscula* in the Peel Inlet in November 2000 indicate a deteriorating resource condition for the estuarine system and poses potential health risks for people using the estuary for recreational activities.