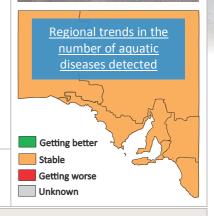
2013 State Report Card

How are diseases affecting our aquatic species?

Aquatic diseases can have devastating impacts on the marine and freshwater ecosystems that underpin our tourism (worth \$4.4 billion in 2011), fisheries and aquaculture industries (together worth \$1.8 billion in 2011).

Disease outbreaks can result from poor environmental conditions, which can increase susceptibility to existing diseases, or from the introduction of new diseases. Diseases can be introduced by the movement of contaminated boats and equipment or infected animals. The impact of exotic disease introductions can be devastating. For example, in both 1995 and 1998 an introduced virus killed about 70 per cent of the sardines in South Australia.

Preventing the introduction and establishment of new diseases is a high priority. The Department of Primary Industries and Regions South Australia conducts surveillance for high priority diseases, investigates fish kills, enforces quarantine measures and develops management plans to increase the likelihood of containing a disease if one is detected.





State target

Limit the establishment of pests and diseases and reduce the impact of existing pests

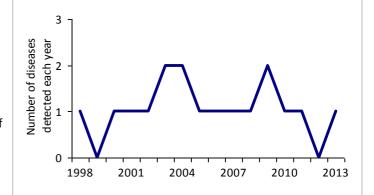
Trend (1998-2013)

Stable

Up to 2 priority aquatic disease outbreaks have been recorded each year

In South Australia, 56 diseases that affect fish and shellfish are regarded as <u>priorities</u> to manage or keep out of our waters. In the past five years there has been up to two of these diseases recorded each year (see graph on right). They were Perkinsus, a parasite of abalone (detected in 2009, 2011 and 2013) and a fish disease, viral encephalopathy and retinopathy (detected in 2009 and 2010).

In most cases, aquatic diseases are only investigated and recorded if they are found and reported by the public or commercial fisheries and aquaculture industries. It is possible that diseases are present which have not been identified.



Where we are at (2013)

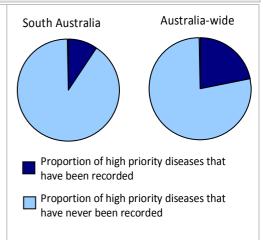
Good

South Australia is relatively free of aquatic diseases

Of the 56 priority fish and shellfish diseases, only 6 have been recorded in South Australia, compared to 16 for the whole of Australia (see graphs on right). Queensland and New South Wales have each been affected by 10 of these priority diseases, and other states have recorded similar numbers to South Australia (Western Australia at 7, Tasmania at 6, and Victoria at 5).

Amass die-off of fish in South Australia in 2013 was linked to an algal bloom, which was caused by abnormally warm surface waters throughout South Australia.

The South Australian Museum monitors disease outbreaks in marine mammals. In 2013, an outbreak of a viral disease (Morbillivirus) contributed to the deaths of over 30 dolphins. Other diseases affecting marine mammals that have been found include a naturally-occurring hookworm, which kills some Australian sea lion pups, and tuberculosis, which has been found in one seal.



Reliability of information



Good

Further information: Technical information for this report card, Aquatic Animal Health in South Australia

