NSW GOVERNMENT Department of Primary Industries

primefact

Caulerpa taxifolia in NSW

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Aquatic Biosecurity & Risk Management

What is Caulerpa taxifolia?

Caulerpa taxifolia (Caulerpa) is a bright green, fast growing alga that originates from tropical areas of the Indo-Pacific, including northern Australia. It is not native to NSW (except Lord Howe Island). It was first identified in Port Hacking in 2000 and is now found in 14 estuaries and coastal lakes throughout NSW.

Once a popular aquarium, plant Caulerpa is now banned in NSW from possession and sale.

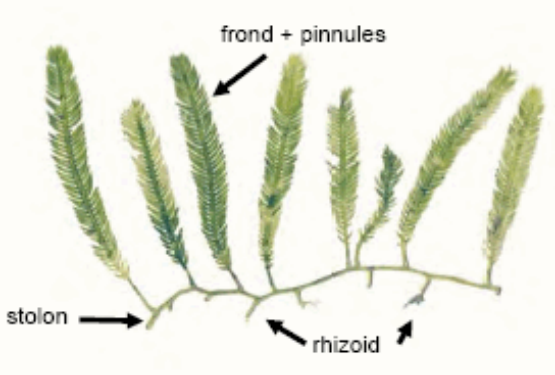
Why is it a problem?

Caulerpa is a marine pest due to its hardy nature and ease of translocation. The species has caused severe impacts in the Mediterranean and when first detected in NSW it was feared that similar aquatic habitat impacts would be possible.

Fifteen years of scientific observations and published research into Caulerpa in NSW indicate that the impacts on native seagrasses are not as severe as once thought. As a result of these findings, management practices have changed.

Figure 1. ***Caulerpa taxifolia*.**

Illustration: Tim Glasby



What is DPI doing about Caulerpa?

In 2000 Caulerpa was listed as a marine pest in legislation, prohibiting possession and sale of the species.

In 2015 a DPI risk assessment regarding Caulerpa in NSW described observations such as:

- Management of Caulerpa should focus on minimising spread from affected estuaries.
- Caulerpa populations are known to increase and decrease without human intervention and in response to natural environmental fluctuations such as wading birds, water currents, wind, waves and tides.
- Caulerpa populations may disappear by natural means.

DPI will investigate new reports of suspected Caulerpa only from waterways where it has not been known to occur. Control works will generally not be supported except in very exceptional situations in new estuaries.

How to identify Caulerpa

- Caulerpa has light to bright green feather-like fronds that are attached to a main stem (stolon) that runs along the ground.
- The stolon can measure over 1m long and has root-like structures called rhizoids to attach to the substrate.
- Caulerpa can be distinguished from other similar species by the characteristic branching pattern of the pinnules (small lateral branches on the fronds), which attach directly opposite each other on the fronds.

Figure 2. Caulerpa in a NSW estuary.

Photo: Tim Glasby

What you can do to help

"*Make 'clean' part of your routine*"

DPI encourages waterway users to ensure that this marine pest is not spread to unaffected locations. As well as natural disturbances, fragments of Caulerpa that end up on boats, trailers, fishing gear, nets or on anchor wells can remain viable for many days in the right conditions making it easy to be translocated to other waterways. Propellers and anchors can cut the fragments into small pieces which can then colonise new areas.

You can help by:

- Disposing of any fragments in the bin.
- Thoroughly cleaning vehicles, boats, trailers and equipment when moving between waterways, which can significantly reduce the risk of transporting aquatic pests and disease.
- Reporting suspect observations of Caulerpa from aquaria retail outlets or new estuaries on (02) 4916 3877

Figure 3. Fragment of Caulerpa on anchor chain.

Photo: NSW DPI

More information

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www.dpi.nsw.gov.au/biosecurity/aquatic

For updates go to
www.dpi.nsw.gov.au/factsheets

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