Department of Primary Industries
Department of Regional NSW

December 2023

Background Paper:

Review of the regulatory status of frogbit under the NSW Biosecurity Act 2015

Frogbit ecology and current regulatory status

Frogbit (*Limnobium laevigatum)* is a fast-growing aggressive floating water weed. It invades waterways and forms dense mats across the water surface. Frogbit is spread by seed and plant fragments, with water movement - particularly floods - the main pathway of spread. It is likely that birds spread seed and smaller plants. Plants are frequently traded online and the dumping of unwanted plants into waterways is responsible for several infestations. Seed longevity is thought to be at least 4 years. Given that there is no routine weed management in most aquatic ecosystems, the plants' ability to tolerate average weed management practices is very high.

The *Biosecurity Act 2015* (the Act) contains a range of tools for the management of biosecurity risks in NSW including prohibited matter, control orders, biosecurity zones and the general biosecurity duty. Frogbit has been regulated as prohibited matter under the NSW *Biosecurity Act 2015* since it came into effect on 1 July 2017.

Prohibited matter is the appropriate regulatory tool for biosecurity matter that could have a significant adverse impact on the economy, environment or community (i.e. is considered very high risk) and generally includes pests not found in Australia or which are present in another State or Territory but not NSW.

Current extent of frogbit

Since the discovery of the first naturalised infestation of frogbit in NSW in July 2017, this species has been recorded at 277 premises in 9 LLS regions across NSW (current 30 Sept 2023):

Number	Premise type
128	open dams, creeks, rivers and wetlands
141	closed ponds and aquariums (includes online sale sites)
8	Retail points including markets

The large number of online sellers - particularly in the Greater Sydney LLS region and in states adjoining NSW - and the significant increase in the number of naturalised infestations in NSW following flood events between 2020 and 2023 has prompted a review of the regulatory status of frogbit.

Weed risk and feasibility of coordinated control

The NSW Weed Risk Management System was applied to frogbit at the NSW scale in 2019, and again recently as part of the review process. The following changes were established:

WRM date	Weed Risk Score	Weed Risk Category	Comparative Feasibility Score	Feasibility Category	Management Priority
2019	104	High	0	Very High	**DESTROY INFESTATIONS**
2023	303	Very High	50	Medium	**CONTAIN SPREAD**

Based on the large number of infested premises in NSW and the reduced feasibility of coordinated control, the State Weeds Committee has agreed that it may no longer be appropriate to regulate frogbit as prohibited matter in NSW. DPI has been asked to consult key partners and stakeholders on the application of the other management tools available under the Act.

Guide to the use of management tools

Control Orders are regarded as an appropriate management tool for:

- Management of medium and high biosecurity risks i.e. identified as posing a medium to high risk to NSW, through a weed risk assessment completed using the NSW Weed Risk Management System.
- Preventing the introduction of biosecurity matter.
- Swiftly responding to the presence of biosecurity matter where the focus is eradication and preventing the spread of biosecurity matter.
- Situations where a new management response is dynamic and changes are required on an ongoing basis, before transitioning to other management arrangements or the regulation.
- Ensuring a timely response while longer term management arrangements are being developed.

Biosecurity Zones are regarded as an appropriate management tool for:

- Management of medium biosecurity risks
- Management of biosecurity matter over an extended period where the focus is on containment, minimising the risk of spread and its impact in the affected area.
- Application where different management actions are required in different parts of NSW or to protect a portion of the state from the introduction of a particular biosecurity risk (but can apply to the whole State).

The general biosecurity duty is regarded as an appropriate management tool for:

- Dealings with biosecurity matter and carriers of biosecurity matter
- Preventing, eliminating or minimising biosecurity risks as far as is reasonably practicable.
- Management of biosecurity matter identified as a risk within a particular region or area.
- Management of biosecurity matter that is widespread or established where the focus is on managing and minimising its impact.
- Management of biosecurity risk where industry or the community need to share in the responsibility of, and be proactive in, managing the risk and are best placed to determine the action required to prevent, eliminate, or minimise a biosecurity risk.