

13. AQUATIC VEGETATION MANAGEMENT (EGERIA DENSA)

Officer responsible Water Services Manager	Author Chris Rance
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The purpose of this report is to advise the Committee of matters related to the management of the invasive aquatic weed *Egeria densa*. Recent developments and consultation proposals are noted and future actions discussed.

BACKGROUND

A report was presented to the Parks and Recreation Committee in June 1999 advising the discovery of a new aquatic weed in Kerrs Reach on the Avon River which had serious implications for river management in Christchurch waterways and throughout the South Island.

Following consultation with Environment Canterbury, NIWA and others, it was considered that eradication of the *Egeria* weed species could be achieved by suction dredging. Suction dredging was subsequently carried out from September to December 1999 and followed up by targeted hand weeding to remove individual plants.

A report on progress was presented to the Joint CRC/CCC Committee in March 2000. Comment in that report stated that the suction dredging had achieved some clearance although follow up work and monitoring was necessary. The respective roles of the Christchurch City Council and Environment Canterbury were also discussed in the report.

Although initial results were positive and it appeared that some control of the *Egeria* was being achieved, results of further underwater surveys carried out by NIWA in May this year were disappointing and widespread regrowth was recorded throughout the Kerrs reach area. The occurrence of *Egeria* species is still at a relatively low density (15% of area) in Kerrs Reach but has the potential to take over the whole area in a few years.

It became apparent to Waterways & Wetlands staff that the eradication of *Egeria* may be unrealistic and any required change in management of the species could have serious implications for the existing level of service and waterway maintenance costs within the Avon River and beyond.

Scientists from NIWA who have considerable experience with aquatic species elsewhere, were engaged to produce an issues and options report for management of *Egeria densa*. This was received in August 2000. A copy of the NIWA report has been separately circulated to Councillors.

To gain further insight into *Egeria* management issues elsewhere two staff members travelled to the North Island to speak to other authorities who have *Egeria* and other weed species present in their local waterways. The experience gained from this trip has proved valuable and highlights the need to keep the *Egeria* infestation in perspective.

Although Egeria is a recent invader in the Canterbury region, it has been in the North Island since 1946 and is now widespread and managed as one of a number of exotic aquatic weeds. The spread of the Egeria appears to have been accelerated by the mobility of various water users such as trailer boat owners and eel fishermen physically transferring weed fragments between waterways.

The situation in the South Island is currently more positive with known Egeria sites restricted to the Marlborough area and now the Avon River. Even if eradication is not realistic we have a very good opportunity to contain Egeria by responsible and careful waterway management.

This is a major metropolitan issue and a challenge the Council needs to address urgently.

FUTURE MANAGEMENT

In summary, the management options suggested in the NIWA report (August 2000) are:

- 1. Eradication**

In NIWA's view the only feasible means of eradication of Egeria involves the use of introduced Grass Carp. This raises other serious issues associated with the introduction of a further exotic species and control/containment of the Grass Carp.

- 2. Containment**

Containment is intended to limit the spread of Egeria beyond the Avon (or any other site) and its success is likely to be a function of expenditure involved. The use of the aquatic herbicide, diquat, is considered an important tool for this option.

- 3. Do Nothing until Necessary**

This option is considered to be unreasonable given the high recreational use made of Kerrs Reach. In the past year major problems were experienced by the rowing clubs during regattas and training activities from excessive aquatic weed growth.

All these options have significant implications for the existing river users and future waterway management costs. Decisions of this nature are considered to be outside of the role of staff and accordingly waterways and wetlands staff have initiated a consultative approach to formulate a strategy for future management of Egeria.

CONSULTATION PROCESS

The first part of this process involved a stakeholders meeting held on 18 September 2000. Invitations to this meeting were extended to Tangata Whenua, Fish & Game, DOC, NIWA, electricity supply companies, recreational users, community representatives, City and Environment Canterbury councillors, and Environment Canterbury staff. A staff member from the Marlborough District Council also attended and explained the background and impact that Egeria had made on that district since its discovery in 1970s.

The possible implications of the Kerrs Reach Egeria infestation were described to the meeting and supported by the experiences gained from the recent staff trip to the North island. The urgent need for action was explained to the meeting and agreement sought for carrying out herbicide trials this summer.

Various issues were raised at the stakeholders meeting about the use of herbicide and Grass Carp and it was difficult to reach a consensus that endorsed or provided direction for trials over the 2000/01 summer. It was agreed that the Water Services Unit would prepare an action plan detailing trials proposed for this summer and distribute to stakeholders and other interested groups for comment and endorsement. It is likely that a resource consent from the Environment Canterbury will be needed to carry out these trials in Kerrs Reach.

To make progress on the action plan, a further workshop is planned for early October and it is hoped to present a further report on the outcomes of this workshop and details of the proposed trials to the Burwood/Pegasus Community Board and this Committee next month. The report is intended to include implications and recommendations for expenditure to be considered in the coming budget round.

Recommendation: That the Committee endorse the consultative approach adopted by the Water Services Unit so far and support the consultation process as described in this report.

Deputy Chairman's

Recommendation: That the above recommendation be adopted.