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The purpose of this report is to inform the Board about the recent discovery of a new, invasive, aquatic weed species (*Egeria densa*) in the Avon River. The potential issues for waterway management and budget are noted for the Board's information only.

## NATURE OF INFESTATION

Early in April 1999 the vigilant operator of the Christchurch City Council weed harvester reported a new species of weed in Kerrs Reach. This was subsequently identified as *Egeria Densa* by the Parks Unit Botanist and National Institute of Water and Atmosphere (NIWA) scientists.

This particular species is originally from South America and widespread in the North Island, around Blenheim and was recently reported as present on the West Coast of the South Island. *Egeria* was a popular aquarium plant but is now classified as a National Surveillance Plant Pest species that cannot be propagated, sold or otherwise distributed. Until this infestation was identified the Canterbury Regional Council staff considered Canterbury to free of this species. Potentially the vigorous growth habit of this species will cause higher maintenance costs through increased harvesting required to provide a satisfactory level of service for river users and to reduce flood risk from choking of the waterways

## ACTION TAKEN TO DATE

There has been close consultation between Christchurch City Council staff, Canterbury Regional Council staff, and NIWA scientists following the discovery of the *Egeria* infestation.

The options for management of this infestation are limited to either total eradication, the preferred option, or the use of modified waterway management techniques to contain distribution of the *Egeria* plant.

Before any decision can be taken on which is the best option to pursue, it is important to determine the exact nature and distribution of the *Egeria* infestation and its density. Currently the problem appears to be confined to the Kerrs Reach of the Avon River. A map showing where *Egeria* has been discovered to date is attached to this report.

An underwater survey is now under way by NIWA staff to fix the location of plant colonies and check if the infestation has spread beyond Kerrs Reach. The results of this survey should be available by the end of May.

Canterbury Regional Council staff have taken responsibility for inspecting other sites throughout the region to check if further *Egeria* colonies have become established.

## **IMPLICATIONS**

Additional maintenance funding for 1999/2000 will be required for follow up underwater survey work. It is anticipated that this will need to be repeated annually for the next few years at least.

When the size of the infestation is more clearly defined it will be necessary to determine whether eradication is possible. One possible means for achieving this is the use of suction dredging and investigations into this option are underway.

Other more significant cost implications may include the need for increased harvesting in Kerrs Reach and use of more specialised control methods. However it will not be possible to determine this until further investigation work is completed.

## **FUTURE ACTION**

It is intended to produce an Aquatic Vegetation Management Report (AVM) to the Community Board for comment prior to reporting to the Council when the implications of the *Egeria* infestation are clarified. The presentation of this detailed AVM report is intended to be prior to the Council commencing its year 2000/01 budget round so that any additional maintenance funding requests can be considered.

**Recommendation:** That this information be received

Chairman's

**Recommendation:** That the information be received.