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Report to the Rural Services and Wairarapa Committee
from Kevin Worsley, Senior Biosecurity Officer (Plants)

Hornwort Control - Registration of the Herbicide Endothall

1. Purpose

To inform the Committee of the current situation with regards to obtaining New Zealand registration for the herbicide Endothall. The registration application follows from successful trials of the herbicide to control the aquatic pest plant Hornwort.

2. Background

In 2000/01 the National Institute for Water and Atmospherics (NIWA) searched overseas for herbicides with the ability to control Hornwort. Only one product (diquat) is registered in NZ for use in water and this herbicide is only effective against Hornwort in clear water situations.

The product Endothall was located in the USA where it has been widely used for the control of a range of aquatic plants, including Hornwort, since the 1960's. NIWA obtained an Experimental Use Permit from the Pesticides Board to import a limited quantity of the chemical to enable trials to be undertaken in NZ. These included both tank and field trials and were carried out on two aquatic species, Hydrilla and Hornwort.

3. Hornwort in the Wellington Region

The first recorded infestation of Hornwort in the Wellington Region was discovered in a stream flowing from Barton's Lagoon into the northern end of Lake Wairarapa in 1995. Attempts to control this and subsequent infestations located in several streams, drains, wetlands and lagoons associated with the eastern shore of the lake have proven unsuccessful. These included mechanical

removal, which only broke up the plants and encouraged further spread by fragmentation, and the use of weed matting. Both methods resulted only in a temporary clearance as sites rapidly reverted. The poor water quality at all sites negated the use of the herbicide diquat.

While Lake Wairarapa acts as a distribution medium, assisting the spread of the plant to adjacent waterbodies, no established sites have been found in the Lake itself apart from near the Barrage Gates. It is believed that the very high turbidity of the water and exposure to wind discourages the plants establishment.

Recently, substantial infestations of Hornwort have been found in Forest Lake, north of Otaki. This is the first recorded infestation of the species in the Region outside of the Lake Wairarapa area. Other sites are known in the Manawatu-Wanganui Region north of Forest Lake. It is likely this new site has originated from one of these.

4. Control Trials

In conjunction with the Regional Council, NIWA carried out Hornwort control trials in various drains adjacent to the northern end of Lake Wairarapa in March 2001. These involved the surface application of Endothall by spray over three infested areas. A resource consent was required and the material was supplied under NIWA's Experimental Use Permit. The trials proved successful and a recent inspection by a NIWA scientist 12 months after the initial work indicates that the longer-term effects are positive with little re-establishment. Monitoring also indicated negligible affect on native aquatic species.

5. Endothall Registration Process

The field and tank trials have proven the effectiveness of the product and prompted NIWA to encourage the USA manufacturer, Cerexagri, to apply to the Environmental Risk Management Agency (ERMA) for NZ registration. This is being arranged through Elliott Chemicals Ltd, the NZ agent for the manufacturer.

At a recent meeting in Wellington between representatives of Elliott Chemicals, NIWA, DoC, ERMA, and the WRC, the registration process was discussed. It was estimated that the total cost could be between \$80,000 and \$100,000. Elliott Chemicals indicated that from their perspective the projected registration costs made marketing the product uneconomic. They would, however, be prepared to act as an importer if these costs are met by other agencies. There is a limited market in NZ and as Endothall is no longer under patent protection, opposition companies could import it following registration.

Attendees agreed that because of the increasing Hornwort problem in NZ (it has now spread to the South Island) this product needs to be made available with some urgency. Endothall also has the ability to control several important

problem aquatic species not yet present in this country. If available, it would provide an immediate means of control should infestations of these other unwanted exotic species appear.

It was agreed that interested organisations should be contacted to determine whether funds could be made available for the registration process. NIWA will take responsibility for this. Those to be approached are regional councils, DoC and power companies with hydro generating stations. As a future means of compensating those contributing to the registration cost it was suggested that a proportional discounting system be available to funders when purchasing the product. Elliot Chemicals will confirm this in writing.

NIWA and Elliot Chemicals have agreed to gather the information necessary to accompany an application. NIWA will seek to contact potential funders in June. Confirmation of funding will be required by September to determine whether the application proceeds.

5. Communications

There is no provision in the proposed 2002/03 budget for this item should it eventuate. If necessary, approval of the funding could be sought at the six months review.

6. Recommendation

- (1) *That the Committee recognises the ongoing threat that Hornwort poses to the Lake Wairarapa wetlands and the Lower Valley Development Scheme if an effective control agent is unavailable.*
- (2) *That the Committee supports in principle the proposal for the Council to provide a share of the registration costs up to a maximum of \$10,000.*

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