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Corporate Plan Output: Liquid Waste	

The purpose of this report is to inform Councillors of the situation regarding the trial use of Phragmites as a plant in an engineered reed bed for wastewater treatment.

INTRODUCTION

Concerns have been expressed in the media and by individuals and groups (refer deputation by Royal Forest and Bird Society to April City Services Committee) over the Council using this plant in trial reed beds.

The possibility of engineered reed beds as a treatment option at the Belfast Wastewater Plant led staff to consider carrying out trials. Concerns about potential spread of Phragmites was acknowledged and trials have been confined to beds constructed inside two steel sided shipping containers. The trials began in 1997 at the main Christchurch Wastewater Treatment Plant.

The plant stock for these trials came from two sources, Napier and our own Botanic Gardens. The Napier sourced stock have produced seed which has been removed and tested. In this case while the pollen was sustainable the seeds were sterile. The Botanic Gardens sourced Phragmites has not been known to flower. In fact this plant has been growing in a pond in the Gardens for decades without being considered a major problem. It is believed to have originally come from the banks of the Avon River with other plants.

PRESENT TRIAL

Staff are fully aware of the concerns expressed about the potential for the Phragmites plant to spread. There is clearly a divergence of scientific opinion on the question of the potential for Phragmites to spread. While this situation persists the Council would certainly not do anything with Phragmites that could lead to invasive spreading of the plant in the native environment. The present test cells do not allow potential for spreading as they are fully enclosed in steel containers.

In 1998 the Canterbury Regional Council produced its Regional Pest Management Strategy in which Phragmites is listed as a Surveillance Plant Pest in which the sale, propagation or distribution of the plant is prohibited.

To date one application has been made under the Biosecurity Act 1993 by the Selwyn District Council for an exemption to use the plant for Wastewater Treatment purposes at Southbridge. The decision declined this application for exemption. Any future applications would be considered on their merits, but there are strong concerns about the ability of the plant to spread.

It is proposed that the current trials be completed this year. No further work is planned.

It is recognised that use of this plant is an extremely sensitive environmental issue. Any use of it for engineered wastewater treatment would require exemption under the Biosecurity Act and Resource consent under the Resource Management Act.

Chairman's

Recommendation: That the information be received.