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Committee       Landcare  
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## Environmental asset management plan performance indicator

### 1. Purpose

To report to the Committee on progress on the Environmental Asset Management Plan (EAMP) during the 2004/05 financial year in order to meet the performance indicator requirements of the Annual Plan.

### 2. Annual Plan performance indicator

The 2004/05 Annual Plan contains the following performance indicator:

*Environmental assets and settings within the parks, forests and water collection areas will be monitored, protected and enhanced, in accordance with the Parks and Forests Asset Management Plan service levels, within a budget of \$737,000.*

*Compliance with the standards in the Asset Management Plan will be reported to the Landcare Committee following the end of the financial year.*

The performance indicator was substantially **achieved** this year at a cost of \$770,000.

The total spend this year includes costs associated with completing possum control operating in Speedy's Bush, Belmont Regional Park and the Lakes Block, East Harbour Regional Park that were carried over from 2003/04. This year's costs, however, exclude a pest animal and pest plant operation in the northern block in East Harbour Regional Park that have been carried over to 2005/06.

### 3. Contribution to Take 10 Objectives

This performance indicator contributes to the quality of life of the regional community by ensuring that the natural assets (water, ecosystems, flora, fauna etc.) in the regional parks, forests and water collection areas are protected and

that GWRC, as a land manager, displays leadership and showcases good ecosystem management.

#### **4. Progress of the environmental asset management plan**

We have been implementing pest control programmes to maintain ecosystem health in the Council's parks and forests. Possums, goats, pigs, rabbits, deer, mustelids and pest plants have been controlled according to the highest priority needs identified through monitoring work and the pest control programme.

Monitoring work and surveys have continued to provide useful information for the environmental management of Council lands and about the success of control operations. All Water Group contract specifications were met and an independent Landcare Research audit of the data collection in the permanent plots has shown that our work meets industry standards.

#### **5. Key aspects of the work programme achieved**

The following is a summary of the key aspects of the work programme that were achieved during the year.

##### **5.1 Monitoring**

- Rata digital photography and foliar browse assessments were completed in the Hutt and Wainuiomata/Orongorongo Water Collection Areas, as well as in the Northern block of East Harbour Regional Park;
- Hinau fruitfall plots were measured in the Hutt and Wainuiomata/Orongorongo Water Collection Areas;
- Tawa fruitfall plots were measured in Kaitoke Regional park and the Wainuiomata/Orongorongo Water Collection Area;
- Permanent vegetation plots (National Vegetation Survey plots) were re-measured in the Wainuiomata/Orongorongo Water Collection Area (eleven plots in total);
- Bird transect surveys were completed in the Wainuiomata/Orongorongo Water Collection Area, Kaitoke Regional Park, Queen Elizabeth Park, Battle Hill Farm Forest Park, Belmont Regional Park and the Hutt Water Collection Area;
- New bird monitoring in the Lakes Block of East Harbour Regional Park was initiated by members of the Ornithological Society of New Zealand;
- MIRO volunteers completed their annual bird monitoring in the northern block of East Harbour Regional Park;
- Pre-operational possum monitoring was completed in Kaitoke West (Kaitoke Regional Park), Akatarawa Saddle (Akatarawa Forest) and in Korokoro Valley (Belmont Regional Park);
- Post-operational possum monitoring was completed in the Lakes Block (East Harbour Regional Park) and Speedy's Reserve (Belmont Regional Park);
- A survey for introduced insect and fungal pests was completed in Wainuiomata/Orongorongo and Hutt Water Collection Areas, as well as in the Akatarawa and Pakuratahi Forests;

- Pencarrow Lakes pest plant infestations were surveyed;
- New vegetation plots (NVS) were installed in the Lakes Block of East Harbour Regional Park.
- Photo-points to record the change in vegetation over time were set up in the Lakes block in East Harbour Regional Park.
- A moss flora survey was continued in the Wainuiomata/Orongorongo Water Catchment Area;
- Rodent and mustelid numbers were monitored in the Wainuiomata/Orongorongo Water Collection Area and in the northern forest in East Harbour Regional Park;
- Seedling growth in dune exclosure plots were assessed, and dune vegetation plots were re-measured in Queen Elizabeth Park;
- The hydrology of the Ladle Bend Wetland was assessed;
- Fish surveys were completed in Queen Elizabeth Park and Battle Hill Farm Forest Park;
- Monthly flowering and fruiting recording was completed in all parks.

## **5.2 Pest Animal and Pest Plant Control**

### 5.2.1 East Harbour Regional Park

- A ground-based 1080 possum control operation was completed in the Lakes Block. Possum numbers were reduced from a pre-operational trap catch rate (RTC) of 38.1% to a post-operation trap catch of 1%;
- Ongoing possum control was achieved with the continued assistance of MIRO volunteers in the Northern Block. Possum monitoring showed possums to be at 2.9% RTC, well below the target of 5% RTC;
- Four goats and four pigs were culled from the Lakes Block. One goat was culled in the Northern Block. These areas are currently free of goats.
- Pest plant infestations targeted in the Northern Block were climbing asparagus, old man's beard, bomarea, Japanese honeysuckle, cathedral bells and banana passionfruit.

### 5.2.2 Belmont Regional Park

- An ongoing possum control operation using bait stations was established in Speedy's Reserve. Possum numbers have subsequently fallen from 16.6% to 1.1% RTC;
- Volunteers from the Friends of Maara Roa group have continued to maintain bait stations in the Cannons Creek bush remnant;
- An initial possum control operation and bait station set-up has been completed in the Korokoro Valley in preparation for an ongoing possum control operation. A pre-operation possum monitor showed numbers to average 12% RTC.
- Sixty-two goats were culled from Korokoro Valley and Dry Creek, using the Judas goat program. There are problems with goats reinvading the Korokoro Block from neighbouring land.
- Tradescantia, Japanese honeysuckle, old man's beard, montbretia and aluminium plant infestations were controlled at Dry Creek.

- In Speedy's Reserve, old man's beard, climbing asparagus and Japanese honeysuckle were targeted.
- Old man's beard, German ivy and brush wattle were controlled in Korokoro Valley.

### 5.2.3 Kaitoke Regional Park

- Pre-operational planning and preparation for the Kaitoke West aerial 1080 possum control operation was completed. The operation is due to begin early in 2005/2006. A pre-operational possum monitor showed possum numbers to be at 7.8%RTC.
- An intensive large vertebrate hunt in the park resulted in the culling of 66 goats, three pigs and two deer. This park will now be controlled through the use of Judas goats.
- Holly, hawthorn, broom, gorse and Himalayan honeysuckle were controlled in the Te Marua bush remnants.
- Tradescantia, Japanese honeysuckle, blackberry, jasmine, hawthorn, cotoneaster and club moss infestations were targeted in Pakuratahi Forks.

### 5.2.4 Battle Hill Farm Forest Park

- Traps and bait stations were maintained in the bush remnant, as part of ongoing possum and mustelid control;
- Holly, tradescantia, club moss, ivy, hawthorn and Japanese honeysuckle infestations were controlled in the bush remnant, while roadside weed dumpings were also targeted.

### 5.2.5 Queen Elizabeth Park

- Possum control operations continued in both the bush remnant and the dune remnants;
- Rabbits were controlled by night shooting;
- Pampas, karo, elderberry Cape ivy, tradescantia and German ivy infestations on the dunes were cut or sprayed. The last of the boneseed, Italian buckthorn and boxthorn infestations were removed, after a number of years of sustained effort. There will be a need to continue to destroy any seedlings of these species that may germinate.
- Blackberry, willow and Japanese honeysuckle infestations were controlled in the Poplar Avenue wetland.

### 5.2.6 Akatarawa Forest

- 60 goats and 13 pigs were culled in the north-west section of the forest.
- Pre-operational planning and preparation for an aerial 1080 possum operation in Akatarawa Saddle was completed. This operation is due to begin early in 2005/2006. A pre-operational possum monitor showed numbers to be 10.9% RTC.
- Wilding pines were removed from Whakatikei and Draper's Flats wetlands.

- Old man's beard, holly, ivy, buddleia, Japanese honeysuckle and montbretia infestations were controlled.

#### 5.2.7 Pakuratahi Forest

- An intensive goat hunt was completed in the northern section of the forest. 48 goats were culled. A further 39 goats were culled during the year by another contractor.
- Wilding pines were removed from the edges of the Ladle Bend manuka wetland.
- Pest plant infestations targeted were holly, tradescantia, club moss, ivy, hawthorn and Japanese honeysuckle.

#### 5.2.8 Wainuiomata/Orongorongo Water Collection Area

- Pre-operational planning and preparation for the aerial 1080 possum control operation was completed. The operation is due to begin early in 2005/2006. A pre-operational possum monitor showed possum numbers to be at 15.5% RTC.
- 51 goats, 10 deer and 32 pigs were controlled in a number of large vertebrate control operations. The Judas goat control programme has continued to work well here.
- 13 deer, three goats and nine pigs were culled during the "Roar" recreational hunting ballot.
- Buddleia infestations were removed from the Wainuiomata Catchment. There is now only a small stretch of buddleia left in George's Creek, after continued effort has removed this pest plant from the catchment upstream of the treatment plant.
- Pest plants controlled in the Wainuiomata Recreation Area were ivy, holly, buddleia, Japanese honeysuckle and tradescantia.

#### 5.2.9 Hutt Water Collection Area

- An initial intensive hunt in the catchment resulted in the culling of 35 goats, five pigs and two deer.
- Infestations of lotus were controlled on the road into the Eastern Hutt.

### 5.3 Vegetation mapping

A major vegetation mapping project of plant communities on Council land was started this year. This project will take a number of years to complete, but will assist our knowledge of the ecosystems we manage.

### 5.4 Mainland Island Projects

Planning for a 300ha intensive control site in the Northern Block of East Harbour Regional Park has been completed. Parks and Forests will work on this project with the Mainland Island Restoration Organisation (MIRO), which will assist in the recovery of biodiversity.

Some preparation work for the Wainuiomata mainland island has been undertaken this year. The 100m by 150m bait station grid required for a 1,200ha area has been set up. This work needed to be completed prior to the 1080 operation, which is about to begin. Rat numbers can be kept down after that operation through the use of toxin in bait stations.

## **5.5 Fire Protection**

One of the predominant threats to a balanced native vegetative cover is fire. Any fire will probably result in the destruction of vegetation cover over the burnt area.

No fires were attended by staff throughout the year. The fire risk in the Hutt Valley and on the Kapiti Coast was ranked as moderate. Fire training exercises have been held during the year so that we maintain a team who have met the minimum requirements needed to fight fires and are ready to assist the Territorial Authorities with their fire fighting commitments.

## **6. Where to from here?**

During the 2005/06 year, we will continue to implement the EAMP by:

- Completing programmed pest control operations using the most effective techniques;
- Continuing to work towards an integrated program of pest control in high ecological value areas on Council land;
- Developing mainland island pest control programs in selected sites in East Harbour Regional Park and the Wainuiomata/Orongorongo Water Collection Area;
- Exchanging knowledge and ideas with other agencies, such as the Department of Conservation, Territorial Authorities, Landcare Research and the Coastal Dune Vegetation Network;
- Continuing to work with the community.

## **7. Communication**

This report is part of the verification process for meeting Annual Plan performance indicators. There are no other communications opportunities arising from this report.

## **8. Recommendations**

*That the Committee:*

1. **Receive the report.**
2. **Note the contents of the report.**

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