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Committee Landcare Author Philippa Crisp Principal Advisor, Planning and Policy

Environmental asset management plan performance indicator

1. Purpose

To report to the Committee on progress on the Environmental Asset Management Plan (EAMP) during the 2005/06 financial year in order to meet the performance indicator requirements of the Annual Plan.

2. Significance of the decision

The matters for decision in this report do not trigger the significance policy of the Council or otherwise trigger section 76(3)(b) of the Local Government Act 2002.

3. Annual Plan performance indicator

The 2005/06 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 \$1,044,000.

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 *\$934,000*.

4. Contribution to Community Outcomes

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.

5. **Progress of the environmental asset management plan**

Good progress has been made in improving ecosystem health in the parks and forests through the Environmental Asset Management Plan. The pest control programme has been in place now for a number of years and pest numbers have fallen. Improvements are being seen in the health of the forests particularly and in increases in the abundance of indigenous flora and fauna. Possums, goats, pigs, rabbits, deer, and pest plants have been controlled according to the highest priority needs identified through monitoring work and the pest control programme, and two mainland island sites are also underway and are making a major contribution to the biodiversity gains on Council land.

Monitoring work and surveys have continued to provide useful information for the environmental management of Council lands and about the success of control operations. Water Group provides funding for the environmental programme through a contract with Parks and Forests. All Water Group contract specifications have been met. Pest plants are controlled on Council land according to the pest plant priorities identified through weed mapping and strategic analysis – many pest plant infestations have now been completely removed from Council lands. Maintaining environmental health is an ongoing project, but improvements have been achieved.

6. 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.

6.1 Monitoring

- Rata digital photography and foliar browse assessments were completed in the Hutt and Wainuiomata/Orongorongo Water Collection Areas;
- Hinau fruitfall plots were measured in the Hutt and Wainuiomata/Orongorongo Water Collection Areas;
- Tawa fruitfall plots were measured in the Wainuiomata/Orongorongo Water Collection Area and set up in East Harbour Regional Park;
- 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;
- Kereru counts were completed in Kaitoke Regional Park;
- Members of the *Ornithological Society of New Zealand* have continued to complete monthly bird monitoring in the Lakes Block of East Harbour Regional Park;
- *MIRO* volunteers completed their annual bird monitoring in the Northern Block of East Harbour Regional Park;

- Post-operational possum monitoring was completed in Kaitoke West (Kaitoke Regional Park), Akatarawa Saddle (Akatarawa Forest), the Northern Block of East Harbour Regional Park and in Korokoro Valley in Belmont Regional Park;
- Pre-operational possum monitoring was completed in Whakatikei in the Akatarawa Forest;
- 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, the Northern Block in East Harbour Regional Park, Battle Hill Farm Forest Park remnant and the dunes of Queen Elizabeth Park;
- Fish research projects were initiated in Queen Elizabeth Park and East Harbour Regional Park;
- Monthly flowering and fruiting recording was completed in all parks.

6.2 Pest Animal and Pest Plant Control

- 6.2.1 East Harbour Regional Park
 - *MIRO* volunteers have continued to maintain possum control in the Northern Block. Possum monitoring has shown that possum numbers are at 1.8% residual trap catch (RTC), well below the 5% RTC target. This is a great effort on the part of the volunteers;
 - A 300ha grid of bait stations placed 150m by 100m apart have been established near Butterfly Creek. This will enable rats to be controlled to low numbers within the "Mainland Island" site;
 - Nine goats were culled from the Lakes Block. One pig and one deer were shot in the Northern Block;
 - Major control programmes for climbing asparagus and wilding pines were initiated in the Northern Block. Other pest plant infestations targeted were; old man's beard, banana passionfruit, cathedral bells, wild ginger, Japanaese honeysuckle, bomarea, jasmine, Cape ivy and smaller infestations of 7 other species;
 - Boneseed was removed from the escarpment beyond Burdan's gate to keep this pest plant species from making its way to the Lakes Block.

6.2.2 Belmont Regional Park

- Ongoing possum control using bait stations has been underway in Speedy's Reserve. Bait stations are filled every three months;.
- Volunteers from the *Friends of Maara Roa* group have continued to maintain bait stations in Cannon's Creek bush remnant in Belmont Regional Park. The bait station lines have been recut to improve access;

- In Korokoroko Valley, a post-operational possum monitor showed numbers to be at 10.1% RTC. Numbers will have fallen since the ongoing three-monthly fill of bait stations has been operating;
- Tradescantia, Japanese honeysuckle, old man's beard and German ivy infestations were controlled at Dry Creek. Checks were made of infestation sites of eight species that have now been controlled;
- In Speedy's Reserve, old man's beard, holly, wild ginger and Japanese honeysuckle were targeted. The pest plant team tackled large infestations of climbing asparagus;
- Old man's beard, German ivy, hops, Japanese honeysuckle, Darwin's barberry and brush wattle were controlled in Korokoro Valley. Checks were made of past sites of six species that have now been eradicated;
- In Cannon's Creek, control of old man's beard, Japanese honeysuckle and Japanese wineberry was completed.

6.2.3 Kaitoke Regional Park

- The Kaitoke West aerial 1080 possum control operation was completed in August 2005. Possum numbers fell from 7.8% to 0% RTC;
- Twelve goats, three pigs and one deer were culled in a professional hunting operation, making use of the Judas goats present in the area. There are few ungulates present now in this lowland forest;
- Hawthorn, broom, sycamore, blackberry, jasmine and Himalayan honeysuckle were controlled in the Te Marua bush remnants. At Pakuratahi Forks, checks were made of past sites of three species that have now been controlled.

6.2.4 Battle Hill Farm Forest Park

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

6.2.5 Queen Elizabeth Park

- Possum control operations were continued in both the bush remnant and the dune remnants;
- Rabbits were controlled by night shooting;
- Boneseed, Italian buckthorn and boxthorn infestations have now been removed from the dunes, but checks were made to destroy any seedlings of these species that have germinated. Pampas, gorse, karo, elderberry, Cape ivy, tradescantia and German ivy infestations on the dunes were cut or sprayed;

- Blackberry, willow and Japanese honeysuckle infestations were controlled in the Poplar Avenue wetland.
- 6.2.6 Akatarawa Forest
 - A major goat control operation in Akatarawa Forest resulted in the culling of 146 goats, nine pigs and one deer;
 - A possum 1080 operation in Akatarawa Saddle was completed in August 2005. The post-operational possum monitor showed numbers to at 0.8% RTC (the pre-operational level was 10.9% RTC);
 - Old man's beard, hydrangea, buddleia, Japanese honeysuckle, cotoneaster, hops, club moss, holly, Montpellier broom, tradescantia, Darwin's barberry, sycamore, flowering cherry and montbretia infestations were controlled. Checks were made of infestation sites of eight species that have now been controlled in this forest.

6.2.7 Pakuratahi Forest

- An intensive goat hunt was completed in Pakuratahi. A total of 126 goats, three deer and six pigs were culled. A further 32 goats were shot during the year by another contractor;
- Pest plant infestations targeted were; holly, ivy, Mexican daisy, eleagnus and old man's beard. Checks were made of infestations of 12 species previously controlled.
- 6.2.8 Wainuiomata/Orongorongo Water Collection Area
 - An aerial 1080 possum control operation was completed in August 2005. The pre-operational possum monitor showed possum numbers to be at 15.5% RTC, but those numbers fell to 0.1% RTC after the operation;
 - 14 goats, three deer and 15 pigs were culled in professional vertebrate control operations. The Judas goat control programme has continued to work well here, but there will be ongoing re-infestation in the Orongorongo catchment from the eastern and southern boundaries;
 - Three deer, seven goats and two pigs were culled during the "Roar" recreational hunting ballot;
 - Buddleia plants have been removed from all areas upstream of the Morton Dam;
 - Pest plants controlled in the Wainuiomata Recreation Area were; ivy, holly, buddleia, Japanese honeysuckle, barberry and tradescantia.

6.2.9 Hutt Water collection Area

• Four goats, three pigs and three deer have been culled in the Eastern Hutt. Ungulate numbers are now low in this area and a good flush of seedlings has been able to get away.

6.3 Vegetation mapping

A major vegetation mapping project of plant communities on Council land was started last year. This year, the Wainuiomata catchment, the Lakes Block in East Harbour Regional Park and half of Queen Elizabeth Park was mapped. These vegetation classifications are being digitised onto GIS. The vegetation mapping will take a number of years to complete, but will greatly assist our knowledge of the ecosystems we manage.

6.4 Mainland Island Projects

The Wainuiomata Mainland Island is well underway. A strategic plan has been completed for this 1,200ha site, which contains around 1,100 bait stations and 560 possum traps. A yearly operational plan will also be produced. Preparation work for the mainland island was completed in time for the August 1080 operation. Possum and rat numbers have been kept low since the operation, though rat numbers rose in June. Goats, pigs and deer have been controlled within the core site this year. Other Council staff including the Water Group, Biosecurity and Environment are also involved in this project. Biosecurity provides staff time and technical expertise.

The outcome of the Mainland Island project will be determined largely through the monitoring of bird numbers and seedling growth. Bird count stations have been established this year, both within the core site and in a non-treatment area nearby. Similarly, extra ungulate browse lines have been established at both sites to show any improvements in seedling growth.

A 300ha intensive control site is now in place in the Northern Block of East Harbour Regional Park. An unsuccessful non-toxic bait trial was run in this area from March to May. The first bait-station fill with a toxic bait was completed in June. Parks and Forests will work on this project with *MIRO*, which will assist bird recovery in the forest.

6.5 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.

Staff attended one fire this year, as part of a mop-up of a minor fire at Oakleigh Street. The fire risk in the Hutt Valley was ranked as medium, while on the Kapiti Coast it was medium to high. 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.

7. Where to from here?

During the 2006/07 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;
- Implementing the Mainland Island pest control programs in selected sites in East Harbour and 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;

8. 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.

9. Recommendations

That the Committee:

- 1. receive the report.
- 2. *note* the contents of the report.

Report prepared by:

Report approved by:

Report approved by:

Philippa Crisp Principal Advisor, Planning and Policy Murray Waititi Manager, Parks **Murray Kennedy** Divisional Manager, Water Supply, Parks & Forests