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Committee Regional Sustainability
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Key Native Ecosystem - Operational Update

1. Purpose

To update the Committee on Key Native Ecosystem and Territorial Reserve pest management activities within the Wellington region.

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. Background

3.1 What is a Key Native Ecosystem?

Since 2000, Key Native Ecosystems (KNEs) have been defined as areas of prime native habitat of regional significance situated on private land. They are primarily native forest remnants but also include wetlands, dune-lands and coastal escarpments with significant native flora and fauna values.

The first branded KNE programmes got underway in 1996 and were almost solely focussed on possum control in TA reserves such as Otari-Wiltons (WCC) and Porirua Scenic (PCC). The programme developed to include more and more sites (including areas of private land) and became more diverse in an attempt to include other pest species in a larger range of natural habitats and ecosystems, such as wetlands and coastal escarpments.

In 2000 the Biosecurity Department determined that in order to more effectively deliver the KNE programme, a more robust prioritisation process was required. The aim then was the same as it is now; to have a strategic, targeted and pro-active approach.

This early review coincided with the release of the NZ Biodiversity Strategy (February 2000) and a Greater Wellington Biodiversity Workshop (16-17 October 2000).

The workshop resulted in the formation of the GW Biodiversity Co-ordinating Group, which today provides the framework for ecosystem and biodiversity management.

The Biosecurity KNE programme is 'land' focussed, but is only one of several GW ecosystem management programmes. Others include environmental education, riparian, wetlands, marine and rivers.

4. Selection of sites

In 2000 a satellite imagery system that allowed land cover classification became available. This was used to determine 7,280 individual forest or scrub remnants larger than one hectare. Each site was given a priority score based on a range of factors, such as forest/vegetation class, size, natural character, distinctiveness and importance. The priority scores provided an ability to rank sites and created a focus of work programming to try and include the top sites. This became the 'Top 100' programme, which has never quite been fulfilled.

Of note is the fact that all of the lowland native bush sites that had already made the KNE programme were significantly ranked, justifying their early inclusion. Refer to *Appendix 1* for all KNE sites currently under management.

Areas administered by DoC are excluded from the KNE programme as they are managed separately under their "Conservation Management Strategy". Unless Crown agencies agree to be bound to, and contribute to the implementation of the Regional Pest Management Strategy through an Order in Council, the Key Native Ecosystem programme will not apply to Crown land.

5. Objectives for KNE Management

The objective for KNE management is to achieve a measurable improvement in the ecological health and diversity of sites using a range of suitable management techniques, including the following means:

- Ensure KNE are legally protected into perpetuity.
- Establish and implement integrated pest management plans for all KNEs.
- Undertake direct control by service delivery of pests identified in the management plan for each KNE.
- Facilitate the involvement of community groups, where appropriate.
- Co-ordinate site management with other biodiversity initiatives, where possible.
- Use biological control agents where appropriate, and support relevant biological control research initiatives.
- Monitor site recovery using a range of ecological indicators.
- Manage external pressures that are inconsistent with KNE management objectives.
- Provide public education and advice to foster awareness of the need for biodiversity management.

6. Budgeted costs for 2007/08

The budgeted costs for 2007/08 (including overheads) to protect indigenous biodiversity in a comprehensive selection of Key Native Ecosystems is \$653,400 (Pest Animals \$457,300; Pest Plants \$196,100).

7. The KNE qualifying process

With growing public interest about biodiversity issues, it was decided to refine the KNE qualifying process so that it was easier to understand for other GW staff who are involved in linking and overlapping biodiversity issues. The refined process also made it clear that subsequent KNE sites only related to legally protected sites on private land. It also was specific in what Greater Wellington would offer by way of service and what landowner input was expected. The new process resulted in a three tiered assistance programme denoted 'Advisory', 'Covenant' and 'Key Native Ecosystem'. A flow chart of the qualifying process is depicted in *Appendix 2*.

8. Re-evaluation of the KNE management programme

A review of the KNE management programme is currently taking place. This review will look at all components of the programme, including goals and priorities, resource allocation, partnership opportunities and funding. The evaluation should form the driver for improving the existing programme, ensuring adequate resource allocation and creating improved strategic approaches. Such a review should feed into the LTCCP by helping define where needs are the greatest.

9. The Reserves programme - partnerships with Territorial Authorities

Essentially, the Reserves programme has the same set of objectives as the KNE Management programme. Reserves are legally protected under the Reserves Act 1977 and/or the Local Government Act 2002. The allocation of GW resources generally follows the principle of giving priority to the least modified indigenous habitats.

Where priority ecosystems are identified on TA land, funding is sought from the TA under the Reserves Programme, to form financial partnerships. These partnerships are recognised through Memoranda of Understanding, agreed annually. The agreements seek to support biodiversity and ecological health by jointly implementing pest animal and plant management plans. The intention of these joint ventures are to share operational costs, appoint proficient contractors, review the plans regularly and to give commitment to maintaining existing operations before commencing new projects.

Most Reserves are situated within or adjacent to urban areas. The risk management associated with control measures must be of the highest order and always involves permissions from the Public Health Unit. Appropriate engagement with the community on operational risk issues is also mandatory.

10. Tables of sites

Tables of all currently managed sites are identified in *Appendices 3-7*. The sheets are divided into Western Zone Reserves and private KNE, and Wairarapa Reserves and private KNE. The sheets detail the current maintenance status, the service provider, the target species, the common name for the project and the size of the treatment area. There is a total of 18,382 hectares programmed for pest animal treatment for the 2007/08 year.

11. Volunteers and Care Groups

Care groups and volunteers undertake both pest animal and pest plant control in many TA Reserves and areas of private land within the region. Volunteers are involved in at least 21 of the 90 plus KNEs, covering approximately 2,250 hectares of forest, wetland, estuary and coastal ecosystems.

Several volunteer groups have grown considerably since their establishment and, having been successful in one area, they move on to challenging new sites. Three of the larger and really dedicated volunteer groups are the Makara Peak Mountain Bike Park Supporters, Upper Hutt Branch of Forest & Bird Society and the Friends of Tawa Bush Reserves. Successful, dedicated volunteer groups like this are vital to optimising ecological health in the region.

12. Ecological monitoring

Monitoring is undertaken in a number of selected KNE sites throughout the region. The monitoring has three aims:

- To determine whether environmental outcomes and objectives have been achieved.
- To determine the direction of maintenance programmes with regard to control methods and priorities.
- To provide an operational and performance measure.

Monitoring programmes are undertaken for rodents, possums, mustelids and native birds. Possum, rodent and mustelid monitoring is useful for comparing populations before and after control. Native bird monitoring indicates relative abundance and trends following predator control.

13. Communication

Section 85 of the Biosecurity Act 1993 requires an annual report to be prepared on implementation of the Regional Pest Management Strategy Operational Plan. This annual report is publicly notified and is circulated to a wide range of stakeholders, including Ministers of the Crown, and contains full updates on Key Native Ecosystem activities for the financial year.

14. Recommendations

That the Committee:

1. **Receives** the report.
2. **Notes** the content of the report.

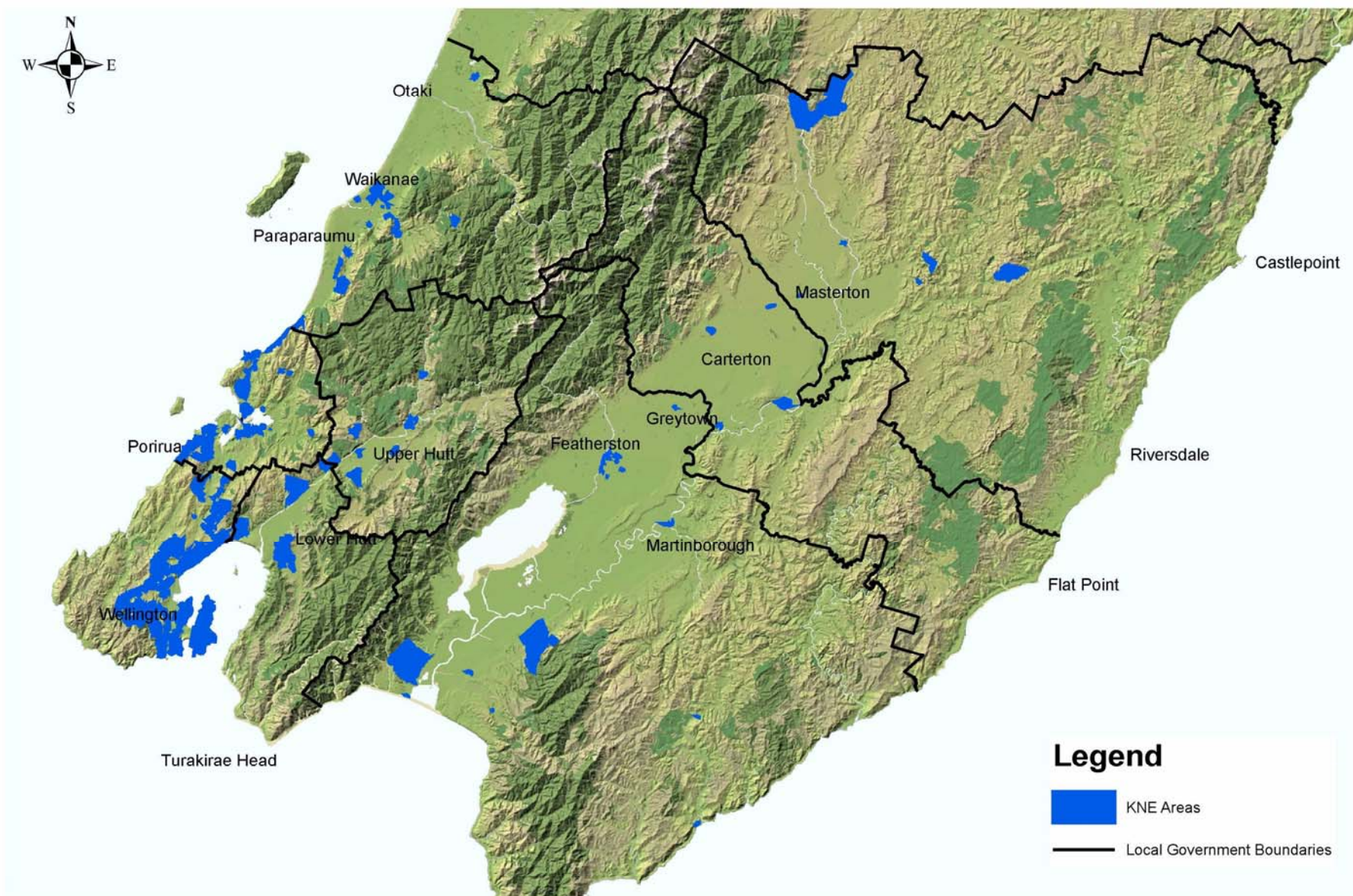
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Appendix 1: Key Native Ecosystems and Territorial Authority Reserves
Appendix 2: Protecting Native Habitats on Private Land
Appendix 3: YTD Work Programme - Possum and Predator Management Areas - Wairarapa
Appendix 4: YTD Work Programme - Possum and Predator Management Areas – Western Zone TLAs
Appendix 5: YTD Work Programme - Possum and Predator Management Areas – Western Zone Private
Appendix 6: YTD Work Programme – West Zone
Appendix 7: YTD Work Programme – East Zone

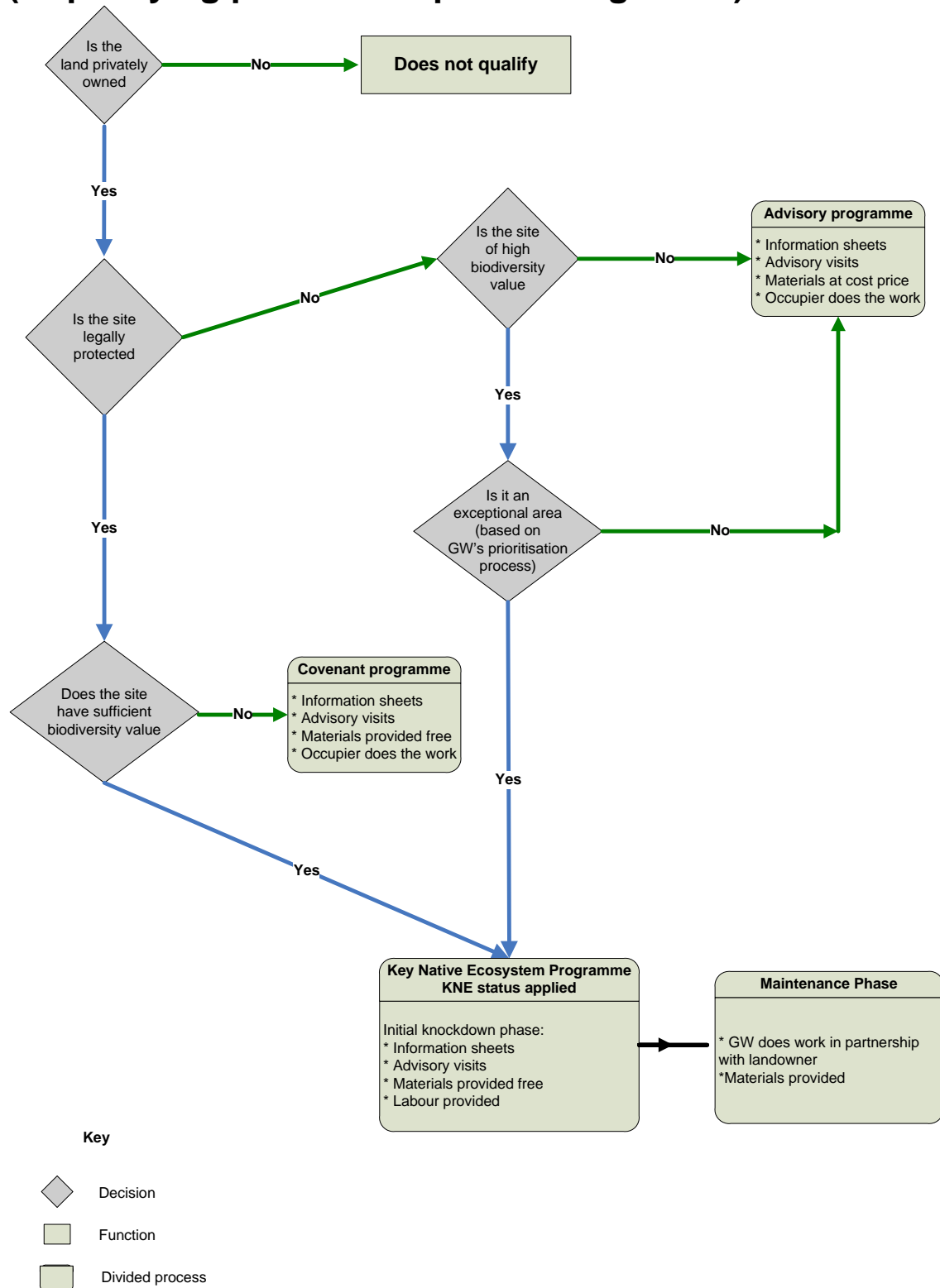


Key Native Ecosystems and Territorial Authority Reserves

1:550,000

Protecting native habitats on private land

(A qualifying process for pest management)



Possum and Predator Management Areas					
YTD Work Programme 2007/2008					
Wairarapa					
Territorial Authority	Status	Providers	Target	PRIVATE KNE's	Hectares
Masterton	5th Maint	EC/JMc	All Predators	Sulphur Wells	1,580
Masterton	6th Maint	EC/BioW	All Predators	Pukaha-Mt Bruce Buffer	2,200
Masterton Subtotal					3,780
Carterton	3rd Maint	GW	All Predators	Pikes Lagoon	152
Carterton	4th Maint	GW	All Predators	Taumata Oxbow	33
Carterton	7th Maint	V	All Predators	Fensham Reserve (F&B Assist)	30
Carterton	8th Maint	GW	All Predators	Waingawa Swamp	8
Carterton Subtotal					223
South Wairarapa	4th Maint	EC/JMc	All Predators	Waihora Stream	1,089
South Wairarapa	9th Maint	GW	All Predators	Morisons Bush	2,700
South Wairarapa	9th Maint	GW	All Predators	Lake Nganoke	6
South Wairarapa	9th Maint	GW & V	All Predators	Linkwood Bush (YMCACC)	5
South Wairarapa	9th Maint	GW	All Predators	Pounui/Wharepapa	875
South Wairarapa	10th Maint	GW	All Predators	Tauherenikau	1,350
South Wairarapa	10th Maint	GW & V	All Predators	Tora Coast Bush (YMCACC)	15
South Wairarapa Subtotal					6,040
Maintenance Subtotal					10,043
Territorial Authority	Status		Target	TLA RESERVES	
Masterton	1st Maint	GW	Possums	Solway Showgrounds Bush	3
Masterton	1st Maint	GW	All Predators	Rewanui Reserve Bush	333
Masterton Subtotal					336
Carterton					
Carterton Subtotal					0
South Wairarapa					
South Wairarapa	6th Maint	GW & V	Possums	Greytown Park Bush (Vol Asst)	4
South Wairarapa Subtotal					4
Initial Subtotal					340
Total					10,383

EC = External Contractor

V = Volunteers

JMc = McCaslin Trappers

Possum and Predator Management Areas					
YTD Work Programme 2007/2008					
Western Zone TLA's					
Territorial Author	Status	Provider	Target	TLA Reserves	Hectares
Kapiti	Initial	GW	Poss	Waikanae River Bush Blocks 50/50	20
Kapiti	8th Maint	GW	Poss	Waikanae Reserves Various 50/50	11
Kapiti	2nd Maint	GW	Poss	Devils Elbow 50/50	21
Kapiti	7th Maint	V	Poss	Kaitawa 50/50	12
Kapiti	7th Maint	EC/HVC	Poss	Raumati Escarpment (50/50)	25
Kapiti	7th Maint	V	All Predators	Waimeha Lagoon (50/50)Care Group	8
Kapiti Subtotal					97
Porirua	8th Maint	GW	Poss	Porirua Scenic Reserve (50/50)	401
Porirua	8th Maint	V	Poss	Paekakariki Coastal Escarp (GW&CG)	117
Porirua	10th Maint	GW	Poss	Raroa Reserve 50/50	18
Porirua	8th Maint	GW	Poss	Karehana Bay 50/50	170
Porirua	7th Maint	GW	Poss	Porirua Park 50/50	39
Porirua	5th Maint	GW	Poss	Papakowhai/Whitby 50/50	92
Porirua	3rd Maint	GW	Poss	Cambourne/Mana 50/50	23
Porirua	2nd Maint	EC/HVC	Poss	Ara Harakeke 50/50	84
Porirua Subtotal					944
Wellington	10th Maint	GW	Poss	Otari/Wiltons Bush 50/50	87
Wellington	8th Maint	EC/HVC	Poss	Trellisick Park 50/50	93
Wellington	8th Maint	V	Poss	Amesbury Reserve 50/50	4
Wellington	Initial	GW	Poss	Outer Town Belt Tops 50/50	
Wellington	10th Maint	WCC	Poss	Wn Botanic Gardens 50/50	32
Wellington	8th Maint	GW	Poss	Johnston Hill 50/50	80
Wellington	8th Maint	GW	Poss	Khandallah Park 50/50	324
Wellington	8th Maint	EC/HVC	Poss	Johnsonville Park 50/50	120
Wellington	10th Maint	V	Poss	Makara Peak 50/50	252
Wellington	8th Maint	EC/HVC	Poss	Huntleigh Park 50/50	205
Wellington	8th Maint	EC/HVC	Poss	Kaiwharawhara/Ngauranga 50/50	305
Wellington	8th Maint	V	Poss	Redwood Bush 50/50	47
Wellington	8th Maint	GW	Poss	Denton Park/Polhill 50/50	76
Wellington	8th Maint	EC/HVC	Poss	Tinakori Hill 50/50	112
Wellington	7th Maint	GW	Poss	Wrights Hill 50/50	163
Wellington	7th Maint	GW	Poss	Karori Park 50/50	51
Wellington	6th Maint	GW	Poss	Brooklyn Hills/Mount Albert 50/50	167
Wellington	Initial	GW	Poss	Te Kopahou Reserve 50/50	
Wellington	6th Maint	GW	Poss	Miramar Peninsula 50/50	627
Wellington	5th Maint	GW	Poss	Mt Victoria/Hataitai Park 50/50	339
Wellington	5th Maint	GW	Poss	Happy Valley East 50/50	183
Wellington	5th Maint	GW	Poss	Houghton Bay/South Gate 50/50	200
Wellington	5th Maint	V	Poss	Mexted/Trotters 50/50	34
Wellington	4th Maint	EC/HVC	Poss/goats	Carey Gully 50/50	150
Wellington	4th Maint	GW	Poss	Hutt Escarpment 50/50	352
Wellington	4th Maint	GW	Poss	Seton Nossiter Park/Granada 50/50	123
Wellington	2nd Maint	GW & V	Poss	Woodburne Drive Bush 50/50	13
Wellington	3rd Maint	GW	Poss	Grenada North/Horokiwi 50/50	168
Wellington	3rd Maint	GW	Poss	Spicer Block 50/50	160
Wellington Subtotal					4003
Lower Hutt					0
Lower Hutt	11th Maint	GW/HCC	Poss	Percy's Scenic Reserve (bait/signs)	40
Lower Hutt	8th Maint	GW	Poss	Kelson Bush (100%GW)	391
Lower Hutt	2nd Maint	GW	Poss	Hutt Western Hills 50/50	249
Lower Hutt	4th Maint	EC/HVC	Poss	Parkway/Wainuiomata Hill West 50/50	339
Lower Hutt Subtotal					1019
Upper Hutt	11th Maint	GW	Poss	Trentham Memorial Park 50/50	17
Upper Hutt	10th Maint	V	Poss	Maidstone 50/50	30
Upper Hutt	10th Maint	V	Poss	Keith George Memorial Park 50/50	147
Upper Hutt	8th Maint	V	Poss	Wi Tako (100%GW)	147
Upper Hutt	7th Maint	V	Poss	Emerald Hill 50/50	52
Upper Hutt					
Upper Hutt Subtotal					393
Subtotal					6,688

EC = External Contractor HVC = Hutt Valley Contra V = Volunteers

Possum & Predator Management Areas					
YTD Work Programme 2007/2008					
Western Zone Private					
Territorial Authority	Status	Provider	Target	Private KNE's	Hectares
Kapiti	11th Maint	Occ	Poss	Burnard Gardens (GW&Occ)	5
Kapiti	9th Maint	GW	Poss	Nga Manu (100%GW)	49
Kapiti	6th Maint	GW	Poss	Te Rama (100%GW)	10
Kapiti	5th Maint	Occ	Poss	Bluff Hill (GW&Occ)	13
Kapiti	3rd Maint	Occ	Poss	Te Harakeke Swamp (100%GW)	175
Kapiti	1st Maint	EC/HVC	Poss	Whareroa 100%GW	151
Kapiti	Initial	GW/Occ	Poss	Carters Covenant	70
Kapiti	2nd Maint	Occ	Predators	O Te Pua (Booth) Wetlands	6
Kapiti Subtotal					479
Porirua					
Porirua	2nd Maint	Occ	Poss	Wairaka Farm (John Carrad)	20
Porirua	8th Maint	Occ	Poss	Collyns (supply bait)	8.5
Porirua	11th Maint	Occ	Poss	Jacobsons' Bush (supply bait)	10
Porirua	9th Maint	Occ	Poss	Grays Bush (supply bait)	1.5
Porirua	1st Maint	GW	Predators	Pikarere Farm (100%GW)	300
Porirua	Initial	GW	Poss	Hongoeka Bay (Community T	74
Porirua	2nd Maint	GW	Poss	Ranui Heights Forest	56
Porirua Subtotal					470
Wellington	Initial	GW	Poss	Warrens Bush	20
Wellington	12th Maint	Occ/GW	Predators	Karori Wildlife Sanctuary	227
Wellington	Initial	Occ/GW	Poss	Long Gully (Nature Heritage	65
Wellington Subtotal					312
Lower Hutt					0
Lower Hutt Subtotal					0
Upper Hutt	Initial	Occ/GW	Predators	Flux Covenants	70
Upper Hutt	Initial	Occ/GW	Poss	Sargent Covenant	40
Upper Hutt Subtotal					110
				Total	1,371

EC = External Contractor

Occ = Occupier

HVC = Hutt Valley Contracting

Appendix 6

Pest Plant Management Areas					
YTD Work Programme 2007/2008					
West Zone					
Territorial Authority	Status	Providers	Target	PRIVATE KNE'S (*Care Group)	Hectares
Kapiti District	2nd Maint	Contract & Care Group	All spp	<i>Paekakariki Escarpment *</i>	270
	3rd Maint	Contract	Convolvulus	<i>Te hapua Wetland complex</i>	40
	2nd Maint	Contract	OMB	<i>O-te-Pua Wetland</i>	20
	3rd Maint	Contract	Japanese Honeysuckle	<i>Te Harekeke Wetland</i>	50
Porirua City				<i>Nil</i>	0
Wellington City				<i>Nil</i>	0
Hutt City				<i>Nil</i>	0
Upper Hutt City	2nd Maint	Contract	All spp	<i>Flux Covenant</i>	70
				Total	450
Territorial Authority	Status	Providers	Target	TLA Reserves	Hectares
Kapiti District	4th Maint	Contract	All spp	Waikanae Reserves (Motuiti, Russell and Wi Parata)	5
	3rd Maint	Contract	Marram	Waitohu Dunes *	5
	4th Maint	Contract	All spp	Raumati Escarpment	50
	Initial	Contract	All spp	Nga Manu Wetland Complex	35
	3rd Maint	Contract	Willow & Climbers	Waimeha Lagoon *	5
	2nd Maint	Contract & Care Group	All spp	Waikanae Estuary *	20
	Initial	Contract & Care Group	Climbers & woody weed	Waikanae River *	5
Porirua City	4th Maint	Contract	All spp	Porirua Scenic Reserve	318
	4th Maint	Contract	Japanese Honeysuckle & Trad	Porirua Park Bush	22
	4th Maint	Contract	All spp	Pukerua Bay / Raroa Reserve	30
Wellington City	4th Maint	Contract & Care Group	Tradescantia	Trelissick Park *	12
	Initial	Contract	Wildling Pine	Khandallah / Johnsonville Park	20
	Initial	Contract	Climbers & Woody	Tarakena Bay / Moa Point	20
	Initial	Contract	All spp	Makara Estuary *	1
Hutt City	Initial	Contract	All spp	Haywards Reserve	18
	2nd Maint	Contract	Marram	Pencarrow dune gravel system	4
	2nd Maint	Contract	Marram	Petone foreshore	0.5
	2nd Maint	Contract & Care Group	Marram	Eastbourne dunes *	0.5
	2nd Maint	Contract & Care Group	All spp	Moehau Stream *	1
	2nd Maint	Contract & Care Group	All spp	Hulls Creek *	2
Upper Hutt City	4th Maint	Contract	Climbers	Keith George Memorial Park	60
	2nd Maint	Contract	All spp	Moehau Stream	1
				Total	635
West Zone Total					1,085

Pest Plant Management Areas					
YTD Work Programme 2007/2008					
East Zone					
Territorial Authority	Status	Providers	Target	PRIVATE KNE's (*Care Group)	Hectares
Materton District	Initial	Contract	All spp	Rewanui	160
Carterton District				Nil	0
South Wairarapa District	4th Maint	Contract & Staff & Volunteers	All spp	Tauherenikau Bush	20
Territorial Authority	Status	Providers	Target	TLA Reserves	Hectares
Materton District	Initial	Contract & Volunteers	Garden Escapees	Riversdale Beach dunes	7
	Initial	Contract	Garden Escapees	Riversdale Southern wetland	30
Carterton District	Initial	Contract	Marram	Flat Point dunes	2
South Wairarapa District	2nd Maint	Contract & Volunteers	All spp	Greytown Memorial Park	4
				Total	