

# HIGH VALUE SITE PROPOSED PROGRAMME - Sept 2017

Functional Location	Site name	Area (Ha)	Target Weed Species	Weed Control Target Outcomes (year 1)	Animal Monitoring	Rat Control	Stoat Control	Weed and Native Plant Monitoring 1 Annual walk through survey a year	Community group involvement	How Treescape and these groups will work collaboratively
20968-Forest	Te Matuku Bay Esplanade Res 1	24.82	Moth plant (Araujia hortorum), Climbing Asparagus (Asparagus scandens), Rhamnus (Rhamnus alaternus), Boneseed (Boneseed (Chrysanthemoides monilifera), Woolly Nightshade (Solanum mauritianum), Pampas Grass (Cortaderia selloana), Sweet Pea Shrub (Polygala myrtifolia), Japanese Honeysuckle (Japanese Honeysuckle)	Reduction by 20% total cover of all weed species	<b>Rats</b> - Tracking Tunnel - 2 x 1 day monitoring program (1x April, 1x August), Rat bait station monitoring (bait take rates and droppings). <b>Stoats</b> - Stoat trap monitoring weekly January to May, monthly September to December. <b>Native Animal</b> - 1 x Annual bird census.	ERC contract	ERC contract	<b>Pest Plant</b> - Percent cover of all Target weed species across the site <b>Native Plant</b> - Percent cover of native vegetation, mapping of any significant individuals identified <b>Ecosystem Integrity</b> - Determine against ecosystem classifications as identified in A Classification of New Zealand's Terrestrial Ecosystems. <b>Photopoints</b>	Waiheke Resource trust, Forest and Bird, Te Matuku Landcare	Waiheke Resources Trust will continue the majority of weed control along Te Matuku Esplanade with Treescape providing assistance upon request particularly in areas requiring high ropes access expertise. Treescape will conduct weed control in remaining reserves with WRT to integrate into current works. Rat control will be conducted by F&B/Hue Ross with assistance from Treescape (including tunnel monitoring). F&B have indicated that there are stoat traps already in place not being utilised and these assets could potentially be re-commissioned under the Council contract.
20799-Forest	Waiheke Cemetery Reserve									
20965-Forest	Squirells Reserve									
21111-Forest	Arran Bay Esplanade Reserve									
21110-Forest	Te Matuku Stockyard Reserve									
NA	Days Landing									
	Te Matuku Spit									
20770-Forest	Awaawaroa Wetland Reserve	5.52	Climbing Asparagus (Asparagus scandens), Woolly Nightshade (Solanum mauritianum), Pampas Grass (Cortaderia selloana), Willow (Salix spp.), Blackberry (Rubus fruticosus agg.), Japanese Honeysuckle (Lonicera japonica), Arum Lily (Zantedeschia aethiopica), Brush Wattle (Paraserianthes lophantha), Black Wattle (Acacia mearnsii), German Ivy (Delawarea odorata), Spanish Heath (Erica lusitanica), Gorse (Ulex europaeus)	Total control of mature and semi-mature - Woolly Nightshade (Solanum mauritianum), Pampas Grass (Cortaderia selloana), Willow (Salix spp.), Rubus fruticosus agg., Brush Wattle (Paraserianthes lophantha), Black Wattle (Acacia mearnsii), Spanish Heath (Erica lusitanica) and Arum Lily (Zantedeschia aethiopica), Gorse (Ulex europaeus) Reduction by 50% total cover - Climbing Asparagus (Asparagus scandens), Japanese Honeysuckle (Lonicera japonica), German Ivy (Delawarea odorata) No Increase in percent total cover of all other weed species	<b>Rats</b> - Tracking Tunnel - 2 x 1 day monitoring program (1x April, 1x August), Rat bait station monitoring (bait take rates and droppings). <b>Stoats</b> - Stoat trap monitoring weekly January to May, monthly September to December. <b>Native Animal</b> - 1 x Annual bird census.	ERC contract	ERC contract	<b>Pest Plant</b> - Percent cover of all Target weed species across the site <b>Native Plant</b> - Percent cover of native vegetation, mapping of any significant individuals identified <b>Ecosystem Integrity</b> - Determine against ecosystem classifications as identified in A Classification of New Zealand's Terrestrial Ecosystems. <b>Photopoints</b>	Eco Village - Rob Morton (Works in adjacent Eco Village), Giant Kokopu Protection Project	Treescape will provide all rat and mustelid control and monitoring alongside all weed control. Integrating stoat control layout will take into account current stoat traps in close proximity to reserve within the Eco Village. Future collaborations will be integrated into plan
20770-Wetlands	Awaawaroa Wetland Reserve									
20608-Forest	Hunterville Reserve	5.66	Climbing Asparagus (Asparagus scandens), Rhamnus (Rhamnus alaternus), Boneseed (Chrysanthemoides monilifera), Woolly Nightshade (Solanum mauritianum), Pampas Grass (Cortaderia selloana), Sweet Pea Shrub (Polygala myrtifolia), Japanese Honeysuckle (Lonicera japonica), Brush Wattle (Paraserianthes lophantha)	Reduction by 20% total cover of all weed species in non rope access areas	<b>Rats</b> - Tracking Tunnel - 2 x 1 day monitoring program (1x April, 1x August), Rat bait station monitoring (to be conducted by Waiheke Rat Busters). <b>Stoats</b> - Stoat trap monitoring weekly January to May, monthly September to December. <b>Native Animal</b> - 1 x Annual bird census.	To be conducted by WRB	ERC contract	<b>Pest Plant</b> - Percent cover of all Target weed species across the site <b>Native Plant</b> - Percent cover of native vegetation, mapping of any significant individuals identified <b>Ecosystem Integrity</b> - Determine against ecosystem classifications as identified in A Classification of New Zealand's Terrestrial Ecosystems. <b>Photopoints</b>	Orapiu Weedbusters, Waiheke Rat Busters	Waiheke Rat Busters will continue rat control program. Treescape will install maintain and conduct rat tunnel monitoring programs. Mustelid/stoat control will be conducted by Treescape. Treescape proposes to integrate with Orapiu Weedbusters for weed control particularly in areas requiring high ropes access expertise.
20577-Forest	Kuakarau Bay Forest	14.70	Climbing Asparagus (Asparagus scandens), Boneseed (Chrysanthemoides monilifera), Woolly Nightshade (Solanum mauritianum), Japanese Honeysuckle (Lonicera japonica), Arum Lily (Zantedeschia aethiopica), Brush Wattle (Paraserianthes lophantha), Gorse (Ulex europaeus)	Reduction by 30% total cover of all weed species	<b>Rats</b> - To be conducted by Waiheke Rate Busters <b>Stoats</b> - Stoat trap monitoring weekly January to May, monthly September to December. <b>Native Animal</b> - 1 x Annual bird census.	To be conducted by WRB	ERC contract	<b>Pest Plant</b> - Percent cover of all Target weed species across the site <b>Native Plant</b> - Percent cover of native vegetation, mapping of any significant individuals identified <b>Ecosystem Integrity</b> - Determine against ecosystem classifications as identified in A Classification of New Zealand's Terrestrial Ecosystems. <b>Photopoints</b>	Waiheke Rat Busters	Waiheke Rat Busters will continue rat control and tunnel monitoring programs. Mustelid/stoat control will be conducted by Treescape. Treescape will provide primary weed control on this site
20938-Forest	Te Uri Karaka Te Waera Reserve	16.17	Moth plant (Araujia hortorum), Rhamnus (Rhamnus alaternus), Boneseed (Chrysanthemoides monilifera), Climbing Asparagus (Asparagus scandens), Woolly Nightshade (Solanum mauritianum), Blackberry (Rubus fruticosus agg.), Pampas Grass (Cortaderia selloana), Japanese Honeysuckle (Lonicera japonica), Arum Lily (Zantedeschia aethiopica), Brush Wattle (Paraserianthes lophantha), Gorse (Ulex europaeus)	Total control of mature and semi-mature- Moth plant (Araujia hortorum), Rhamnus (Rhamnus alaternus), Boneseed (Chrysanthemoides monilifera), Woolly Nightshade (Solanum mauritianum), Pampas Grass (Cortaderia selloana), Brush Wattle (Paraserianthes lophantha) Reduction by 30% total cover - Climbing Asparagus (Asparagus scandens), Japanese Honeysuckle (Lonicera japonica) No Increase in percent total cover of all other weed species	<b>Rats</b> - Tracking Tunnel - 2 x 1 day monitoring program (1x April, 1x August), Rat bait station monitoring (bait take rates and droppings). <b>Stoats</b> - Stoat trap monitoring weekly January to May, monthly September to December. <b>Native Animal</b> - 1 x Annual bird census.	ERC contract	ERC contract	<b>Pest Plant</b> - Percent cover of all Target weed species across the site <b>Native Plant</b> - Percent cover of native vegetation, mapping of any significant individuals identified <b>Ecosystem Integrity</b> - Determine against ecosystem classifications as identified in A Classification of New Zealand's Terrestrial Ecosystems. <b>Photopoints</b>		Treescape will provide all rat and mustelid control and monitoring alongside all weed control. Future collaborations will be integrated into plan
10302-Forest	Onetangi Sports Park (Te Rangihoua)	52.28	Climbing Asparagus (Asparagus scandens), Moth plant (Araujia hortorum), Woolly Nightshade (Solanum mauritianum), Rhamnus (Rhamnus alaternus), Boneseed (Chrysanthemoides monilifera), Pampas Grass (Cortaderia selloana), Japanese Honeysuckle (Lonicera japonica), Arum Lily (Zantedeschia aethiopica), Brush Wattle (Paraserianthes lophantha), Gorse (Ulex europaeus)	Reduction by 20% total cover - Woolly Nightshade (Solanum mauritianum), Climbing Asparagus (Asparagus scandens), Boneseed (Chrysanthemoides monilifera), Pampas Grass (Cortaderia selloana) No Increase in percent total cover of all other weed species	<b>Rats</b> -To be conducted by WRB <b>Stoats</b> - Stoat trap monitoring weekly January to May, monthly September to December. <b>Native Animal</b> - 1 x Annual bird census.	To be conducted by WRB	ERC contract	<b>Pest Plant</b> - Percent cover of all Target weed species across the site <b>Native Plant</b> - Percent cover of native vegetation, mapping of any significant individuals identified <b>Ecosystem Integrity</b> - Determine against ecosystem classifications as identified in A Classification of New Zealand's Terrestrial Ecosystems. <b>Photopoints</b>	Waiheke Resources trust, Waiheke Go Moth Plant Group, Waiheke Rat Busters, Waiheke Mountain Bike Club	Waiheke Rat Busters will continue rat control and tunnel monitoring programs. Mustelid/stoat control will be conducted by Treescape. Waiheke Resources trust will provide primary weed control in the Wetland area of the reserve. WRT will also provide primary re-planting in areas adjacent to wetland and forest areas to minimise edge effect. Waiheke Go Moth Plant Group will provide primary control of Mothplant throughout entire reserve with Treescape providing assistance. Treescape will provide primary weed control within remainder of the eco polygons targeting Climbing Asparagus and woody weed species.
20481-Forest	Wharf Reserve - Waiheke	10.22	Climbing Asparagus (Asparagus scandens), Woolly Nightshade (Solanum mauritianum), Pampas Grass (Cortaderia selloana), Japanese Honeysuckle (Lonicera japonica), Arum Lily (Zantedeschia aethiopica), Brush Wattle (Paraserianthes lophantha), German Ivy (Delawarea odorata), Pseudosasa sp (Bambusa sp.), Gorse (Ulex europaeus), Hedychium gardnerianum	Total control of mature and semi-mature within Wharf Reserve - Woolly Nightshade (Solanum mauritianum), Pampas Grass (Cortaderia selloana), Pseudosasa sp (Bambusa sp.), Brush Wattle (Paraserianthes lophantha) Reduction by 50% total cover within Wharf Reserve - Arum Lily (Zantedeschia aethiopica), German Ivy (Delawarea odorata), Hedychium gardnerianum No Increase in percent total cover of all other weed species	<b>Rats</b> -To be conducted by WRB <b>Stoats</b> - Stoat trap monitoring weekly January to May, monthly September to December. <b>Native Animal</b> - 1 x Annual bird census.	To be conducted by WRB	ERC contract	<b>Pest Plant</b> - Percent cover of all Target weed species across the site <b>Native Plant</b> - Percent cover of native vegetation, mapping of any significant individuals identified <b>Ecosystem Integrity</b> - Determine against ecosystem classifications as identified in A Classification of New Zealand's Terrestrial Ecosystems. <b>Photopoints</b>	Friends of Te Toki Reserve, Waiheke Rat Busters	Waiheke Rat Busters will continue rat control and tunnel monitoring programs. Mustelid/stoat control will be conducted by Treescape. Friends of Te Toki will provide primary weed control with the forest are of the reserve with Treescape providing assistance upon request - primarily Climbing Asparagus in the first year. Treescape will provide primary weed control within the wetland eco polygon.
20568-Forest	Te Toki Reserve									

20497-Wetlands	Owhanake Reserve	1.45	Moth plant ( <i>Araujia hortorum</i> ), Boneseed ( <i>Chrysanthemoides monilifera</i> ), Woolly Nightshade ( <i>Solanum mauritianum</i> ), Pampas Grass ( <i>Cortaderia selloana</i> ), Japanese Honeysuckle ( <i>Lonicera japonica</i> ), Gorse ( <i>Ulex europaeus</i> )	Total control of mature and semi-mature - Moth plant ( <i>Araujia hortorum</i> ), Boneseed ( <i>Chrysanthemoides monilifera</i> ), Woolly Nightshade ( <i>Solanum mauritianum</i> ), Pampas Grass ( <i>Cortaderia selloana</i> ) Reduction by 50% total cover - Japanese Honeysuckle ( <i>Lonicera japonica</i> ) No Increase in percent total cover of all other weed species	<b>Rats</b> - Tracking Tunnel - 2 x 1 day monitoring program (1x April, 1x August), Rat bait station monitoring (bait take rates and droppings). <b>Stoats</b> - Stoat trap monitoring weekly January to May, monthly September to December. <b>Native Animal</b> - 1 x Annual bird census.	ERC contract	ERC contract	<b>Pest Plant</b> - Percent cover of all Target weed species across the site <b>Native Plant</b> - Percent cover of native vegetation, mapping of any significant individuals identified <b>Ecosystem Integrity</b> - Determine against ecosystem classifications as identified in A Classification of New Zealand's Terrestrial Ecosystems. <b>Photopoints</b>		Treescape will provide all rat and mustelid control and monitoring alongside all weed control. Future collaborations will be integrated into plan
10256-Wetlands	Waiheke Island Reserve	3.48	Blue Periwinkle ( <i>Vinca Major</i> ), Willow ( <i>Salix spp.</i> ), Japanese Honeysuckle ( <i>Lonicera japonica</i> ), Asparagus asparagoides, Brush Wattle ( <i>Paraserianthes lophantha</i> ), Woolly Nightshade ( <i>Solanum mauritianum</i> ), Pampas Grass ( <i>Cortaderia selloana</i> ), Poplar ( <i>Populus spp.</i> ), Arum Lily ( <i>Zantedeschia aethiopica</i> ), German Ivy ( <i>Delairea odorata</i> )	Total control of mature and semi-mature - Woolly Nightshade ( <i>Solanum mauritianum</i> ), Pampas Grass ( <i>Cortaderia selloana</i> ), Willow ( <i>Salix spp.</i> ), Brush Wattle ( <i>Paraserianthes lophantha</i> ) Reduction by 30% total cover - Climbing Asparagus ( <i>Asparagus scandens</i> ), Japanese Honeysuckle ( <i>Lonicera japonica</i> ), German Ivy ( <i>Delairea odorata</i> ), Blue Periwinkle ( <i>Vinca Major</i> ), Arum Lily ( <i>Zantedeschia aethiopica</i> ) No Increase in percent total cover of all other weed species	<b>Rats</b> - Tracking Tunnel - 2 x 1 day monitoring program (1x April, 1x August), Rat bait station monitoring (bait take rates and droppings). <b>Stoats</b> - Stoat trap monitoring weekly January to May, monthly September to December. <b>Native Animal</b> - 1 x Annual bird census.	ERC contract	ERC contract	<b>Pest Plant</b> - Percent cover of all Target weed species across the site <b>Native Plant</b> - Percent cover of native vegetation, mapping of any significant individuals identified <b>Ecosystem Integrity</b> - Determine against ecosystem classifications as identified in A Classification of New Zealand's Terrestrial Ecosystems. <b>Photopoints</b>	Forest and bird (in Adjacent Atwhai Whenua Reserve)	Treescape will provide all rat and mustelid control and monitoring alongside all weed control. The plan layout and monitoring program will align with Forest and Bird's animal control program being undertaken in Atwhai Whenua Reserve and council stoat control programs at Ma Tia Tia reserve. Future collaborations will be integrated into plan
20549-Forest	Owhanake Matiatia Walkway - this site is to be added into Ecological Contract	21.00	Moth plant ( <i>Araujia hortorum</i> ), Rhamnus ( <i>Rhamnus alaternus</i> ), Chrysanthemoides monilifer, Woolly Nightshade ( <i>Solanum mauritianum</i> )	Total control of mature and semi-mature - Moth plant ( <i>Araujia hortorum</i> ) Reduction by 30% total cover in non rope access areas - Rhamnus ( <i>Rhamnus alaternus</i> ), Chrysanthemoides monilifer, Woolly Nightshade ( <i>Solanum mauritianum</i> ) No Increase in percent total cover of all other weed species	<b>Rats</b> - To be conducted by WRB <b>Stoats</b> - Stoat trap monitoring weekly January to May, monthly September to December. <b>Native Animal</b> - 1 x Annual bird census.	To be conducted by WRB	ERC contract	<b>Pest Plant</b> - Percent cover of all Target weed species across the site <b>Native Plant</b> - Percent cover of native vegetation, mapping of any significant individuals identified <b>Ecosystem Integrity</b> - Determine against ecosystem classifications as identified in A Classification of New Zealand's Terrestrial Ecosystems. <b>Photopoints</b>	Waiheke Rat Busters	Waiheke Rat Busters will continue rat control and tunnel monitoring programs. Mustelid/stoat control will be conducted by Treescape. Treescape will provide primary weed control on this site