

Wenita Forestry Natural Areas Assessment Form

Site Location Description

Site Name:	Otokia Stream Native Bush		
Location:	Hope Hill		
Catchment:	Otokia		
Region:	Brighton		
Compartment ID:	N401/N112		
NZMS Grid Reference		GPS Coordinates	
NZMS Grid Reference	CEF16880071	East	-45.957102
East	4907080.855	North	170.264833
North	1388048.670	Accuracy	
Area in Hectares from GIS			
Aerial Photograph Reference			

Site Assessment

Assessment Date(s)	28/08/2014
Revision Date (s)	10/9/2014
Final Report Date (s)	24/9/2014
Assessed By	Paul Pope Spiralis Ltd
Recorded By	Paul Pope Spiralis Ltd
Notes:	

Primary Vegetation Type

Tick box as appropriate

Primary native forest (undisturbed) with emergent podocarps	<input checked="" type="checkbox"/>
Modified native forest (disturbed through logging of native timber)	<input type="checkbox"/>
Secondary (regenerated forest after land clearance)	<input checked="" type="checkbox"/>
Re-vegetated forest (re-established on bare land through planting)	<input type="checkbox"/>
Heavily modified (dominated by weed and exotic species)	<input type="checkbox"/>
Pasture land (predominantly exotic grassland with some weeds)	<input type="checkbox"/>
Tussock grassland with typical native shrub species	<input type="checkbox"/>
Wetland (predominantly wetland/marshland)	<input type="checkbox"/>
Exotic Production Forestry	<input type="checkbox"/>

Notes: A central core gully running from the eastern side is dominated by significant podocarp species of rimu, totara and matai. Within this area are strong remains of sub-canopy species, broadleaf and pittosporum. On the upper (western) and southern and northern edges lies thick kanuka dominated forest with solid broadleaf species and shrub species.

(Predominant) Vegetation Health	Describe as appropriate
Did the primary, modified or secondary forest sites have significant canopy gaps? If yes give an estimate of the number of these and their approximate size.	No – the canopy of the podocarp was largely intact.
In the primary, modified or secondary forest sites show signs of regeneration of native seedlings and shrub size species in the forest floor using the following: <ol style="list-style-type: none"> 1. No visible seedlings 2. Occasional but sporadic and sparse 3. Very common almost every step with a few gaps 4. Abundant and thick making access difficult 	2 – some Rimu seedlings were found within the podocarp area and small totara in the outer kanuka area.
In the primary, modified or secondary forest sites was the plant composition of the forest floor intact with fern and other smaller ground cover species? <ol style="list-style-type: none"> 1. No visible forest floor species 2. Occasional but sporadic and sparse 3. Very common almost every step with a few gaps 4. Abundant and thick making access difficult 	2 – within the podocarp area the forest floor was sporadic of fern and other fern species.
In the tussock grassland with typical native shrub species were there visible gaps, areas of bare vegetation, or areas dominated by exotic forest species visible in the site? If yes give an estimate of the number of these and their approximate size.	N/A
In the tussock grassland sites was there evidence of regeneration of the native plant cover of grass, shrub and groundcover across the site using the following: <ol style="list-style-type: none"> 1. No visible seedlings 2. Occasional but sporadic and sparse 3. Very common 4. Abundant 	N/A
In the wetland (predominantly wetland/marshland) sites visible gaps, areas of bare vegetation, or areas dominated by exotic forest species visible in the site? If yes give an estimate of the number of these and their approximate size.	N/A
In the tussock grassland sites was there evidence	N/A

<p>of regeneration of the native plant cover of grass, shrub and groundcover across the site using the following:</p> <ol style="list-style-type: none"> 1. No visible seedlings 2. Occasional but sporadic and sparse 3. Very common 4. Abundant 	
<p>Notes:</p> <p>This compartment is contrasted by an older vegetation type that has probably been undisturbed, though the sporadic ground cover may indicate previous grazing that site has not recovered from. The disturbed kanuka fringes were in good condition with new emergent broadleaf tree and shrub species coming through.</p>	

Describe the presence, density and species of weeds within the assessed area and give estimations of the potential cover of those species.

Pest Plant Presence					
Vine Species	Heavy >50% Canopy	Moderate >10-30% Canopy	Light <5-10% Canopy	Sparse <5% Canopy	None Not Observed
Muehlenbeckia				<input checked="" type="checkbox"/>	
Passionfruit					<input checked="" type="checkbox"/>
Old Man's Beard					<input checked="" type="checkbox"/>
Chilean Flame Creeper					<input checked="" type="checkbox"/>
Convolvulus					<input checked="" type="checkbox"/>
Other					
Are there multiple vine species present? (If yes describe)	No				
Are the vines species limited to gullies or area fringes? (Describe)	Very minor on the fringes of the site.				
Notes:					

Pest Plant Presence

Shrub Tree Species	Heavy >50% Area	Moderate >10-30% Area	Light <5-10% Area	Sparse <5% Area	None Not Observed	Peripheral edges of area? Yes/No?	Internal parts of area and advancing? Yes/ No?
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Gorse						Yes	No
Broom						No	
H Honeysuckle						No	
Elderberry						No	
Hawthorn						No	
Spanish heath						No	
Willow						No	
Sycamore						No	
Wilding Pine <5 years						No	
Wilding Pine >5 years						Yes	Yes
Other (Describe)	Some minor blackberry has moved to the edges.						

Notes:

Pest Plant Presence

Ground Cover Species	Heavy >50% Area	Moderate >10-30% Area	Light <5-10% Area	Sparse <5% Area	None Not Observed	Peripheral edges of area? Yes/No?	Internal parts of area and advancing? Yes/No
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Aluminium plant					<input checked="" type="checkbox"/>		
Periwinkle					<input checked="" type="checkbox"/>		
Ivy					<input checked="" type="checkbox"/>		
Nasella tussock					<input checked="" type="checkbox"/>		
Iris					<input checked="" type="checkbox"/>		
Blackberry					<input checked="" type="checkbox"/>		
Montbretia					<input checked="" type="checkbox"/>		
St John Wort					<input checked="" type="checkbox"/>		
Agricultural grasses					<input checked="" type="checkbox"/>		
Other (Describe)							

Pest Animal Presence

Species	Heavy Significant faeces sign, marking or prints. Animals seen or heard	Moderate Fresh scattered sign, prints or marking in areas	Light Uncommon sign, marking or prints in area	Sparse Very uncommon sign, marking or prints in area	None Not Observed	Domestic stock sign is the area fenced? Yes /No?	Does the area border a farm Yes/No?
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Opossum					<input checked="" type="checkbox"/>		
Deer					<input checked="" type="checkbox"/>		
Pigs					<input checked="" type="checkbox"/>		
Goats					<input checked="" type="checkbox"/>		
Sheep (Wild)					<input checked="" type="checkbox"/>		
Cattle (Wild)					<input checked="" type="checkbox"/>		
Feral Cat					<input checked="" type="checkbox"/>		
Mustelids					<input checked="" type="checkbox"/>		
Vermin					<input checked="" type="checkbox"/>		

Other (Describe)	
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Are there known animal control programmes undertaken in this area? (Describe)	
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Is the number of recreational hunting permits and animals harvested from the area known for the last 12 months? (Describe)	
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Notes: No animal sign in the area, but this may be due to adjacent logging operations causing disturbance.

Uncontrolled Human Impacts

Activities	Common use within the area, heavy vehicle tracks	Occasional incursions into the area	Light Sporadic use	Sparse	None
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4 WD Ute/Car					<input checked="" type="checkbox"/>
4WD Quad Bike					<input checked="" type="checkbox"/>
Motor Bike					<input checked="" type="checkbox"/>
Mountain Biking					<input checked="" type="checkbox"/>
Fire-wooding					<input checked="" type="checkbox"/>
Camping/Fires					<input checked="" type="checkbox"/>
Camping/Toileting					<input checked="" type="checkbox"/>
Hunting (unpermitted)					<input checked="" type="checkbox"/>
Dumping Vegetation					<input checked="" type="checkbox"/>
Dumping Household					<input checked="" type="checkbox"/>

Notes:

Note the type and number of bird species found within the area. This is not a definitive count or an estimate of abundance only an observation based on the time of assessment.

Avian Fauna

Native Species	Number	Notes
Falcon		
Tui	3	
Bellbird	2	
Kereru	-	
Robin	-	
Tomtit	-	
Morepork	-	
Shining cuckoo	-	
Silvereye	-	
Fernbird	-	
Scaup	-	
Pukeko	-	
Other (Describe)		

Note the type and number of bird species found within the area. This is not a definitive count or an estimate of abundance only an observation based on the time of assessment.

Avian Fauna		
Exotic Species	Number	Notes
Blackbird	2	
Sparrow	1	
Starling	1	
Harrier	-	
Thrush	-	
Rosella	-	
Magpie	-	
Geese	-	
Mallards	-	
Chaffinch	-	
Other (Describe)		

Water Catchment Overview	Yes	No	Estimated Number
Major water bodies (>5 metre in width) within its boundaries?			
Minor water bodies (<5 in width) within its boundaries?	<input checked="" type="checkbox"/>		3-4
Are there wetlands, bogs or fens within the areas boundaries?		<input checked="" type="checkbox"/>	
Artificial water races or water courses?		<input checked="" type="checkbox"/>	
Storage ponds or dams		<input checked="" type="checkbox"/>	
Does the area have an existing SHMAK monitoring site within it?		<input checked="" type="checkbox"/>	
Do roading culverts run into the area?		<input checked="" type="checkbox"/>	
Notes: The steep narrow gullies that run through the site will flow through into the wider catchment during periods of high rainfall.			

The shape, scale and situation of the assessed site will describe how the site connects to the wider landscape as a habitat for the growth of flora and fauna. Aerial photograph and mapping will give a good understanding of this aspect of the assessment, but should be undertaken with a physical inspection.

Landscape and Connectivity

Describe the shape of the assessed area.

- a) A narrow long strip < 50 metres wide adjacent to a waterway
- b) A narrow long strip <50 metres wide adjacent to farmland or exotic forest
- c) A small patch <1-2 hectares
- d) A compact core area with outer strips reaching out from the core
- e) A solid compact defined area
- f) Neither (Describe)

E) the compartment is a solid compact area

Is the area isolated from similar sites within the location? (i.e. surrounded by exotic forest)

- a) The area is surrounded by exotic forest
- b) The area is surrounded by pasture or farm land
- c) There are similar sites within 5-10 kms
- d) There are other similar sites within 2-5 kms
- e) There are other similar sites <1 km
- f) There are other sites immediately adjacent
- g) Unknown (Describe)

A) The area is surrounded by exotic forest

Notes:

Natural Area Ranking Classification

Rank	Description	Criteria	Score
5	Exceptional	<ul style="list-style-type: none"> Large undisturbed site No exotic weeds or introduced species Highly endemic and representative to the particular ecological district 	
4	Very High	<ul style="list-style-type: none"> Last example of its type which was previously widespread in the district Some peripheral disturbance to vegetation in pre European period Creates a large continuous section across the area >200 hectares with minor <5% weed or introduced species cover along fringes Secondary vegetation creates buffer to "exceptional" areas 	4
3	High	<ul style="list-style-type: none"> Modified native vegetation representative of the district and with elements of former composition remaining Contains areas of modified secondary vegetation which provides a buffer to "very high" areas >75 hectares with small areas of weed infestation on the outer fringes (10-20%) Last of the vegetation type in the district but in a modified condition through historical change 	
2	Moderate	<ul style="list-style-type: none"> Substantial human modification of areas Small areas of disparate native vegetation Occasionally act as buffers to larger higher quality sites Very high weed dominance along fringes moving towards outer core Native vegetation cover >10-25% of the area 	
1	Low	<ul style="list-style-type: none"> Very small disjointed areas of native vegetation (sporadic trees or shrubs) Heavy dominance of exotic vegetation and weeds Heavily modified landscape and landforms Examples of secondary succession caused by human disturbance that has created a vastly different vegetation type than previously found Native vegetation covers <10% of area 	

This compartment ranks a 4 only because of the remaining section of intact podocarp forest that remains at the core of the area, while the remaining fringes are regenerating areas of native vegetation that have been disturbed possibly in the late to early 20th century. A useful site in terms of ecological and landscape connectivity.

Recommendations and Additional Comments

This compartment was relatively weed free and the presence of the intact podocarp species makes it interesting and relatively rare in the wider ecological and landscape context. Their value lies in wider connectivity between similar patches of native vegetation within the catchment.

Weed management round the fringes to ensure invasive species do spread to the core of the area.

The removal of the larger wilding pines on the southern edge pictured below.

Regular hunting to ensure no further grazing of the canopy would be useful.



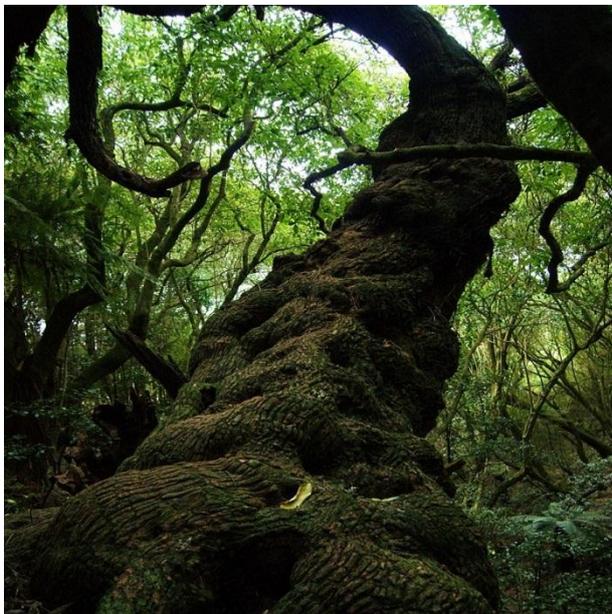
Eastern Overview showing the podocarp core and the regenerating fringes. Note the wildings on the Northern edge.



Totara in the podocarp compartment. Note the sparse ground cover. This may have been caused by heavy grazing during adjacent farming use.



Moving out of the Podocarp core the broadleaf canopy is in good condition and heavily divided by steep gullies that will be useful catchment areas during high rainfall periods.



The compartment still had a number of large sub canopy species intact like this Kapuka.