

MANAGEMENT PLAN FOR BEACH BAY AND PENINSULA,
WALTER PEAK
LAKE WAKATIPU

for

REAL JOURNEYS



Beach Bay, Beach Point and peninsula

~~April 2014~~ MAY 28th 2014

Neill Simpson
email: n.simpson@extra.co.nz
phone: 03 4422035

Conservation Consultancy Limited
P O Box 478
Queenstown

MANAGEMENT PLAN FOR WALTER PEAK, LAKE WAKATIPU

INTRODUCTION

Real Journeys has recently purchased 155 ha of land and buildings in Beach Bay and the Von Hill Peninsula.

Real Journeys have an agreement with DoC on the adjoining S.E. reserve, providing the rights to build and maintain berms to deflect water and debris flows and also to undertake further tree planting as a means of protection for the Colonel's Homestead.

Real Journeys as part of the land swap with DoC, have acquired land in front of the Colonel's Homestead and swapped land at Beach Point. As part of this land swap R.J. are required to provide (1) various facilities at Beach Point, (2) a track each Bay to Beach point, (3) maintain the foreshore Beach Bay to Beach Point.

Both areas contain many problem conifers (mainly Douglas fir) that are sending seed onto neighbouring properties. The conifers cover a considerable area of the western land that also contains blackberry (*Rubus fruticosus*), broom (*Cytisus scoparius*), gorse (*Ulex europaeus*), sweet briar (*Rosa rubiginosa*), hawthorn (*Crataegus mongyna*) and other woody weed pests or ecological weeds as classified by the Department of Conservation (DoC). Extensive areas of grassland, much of which is grazed, are found at the southwest end of the property that also includes a grass air strip. Bracken fernland covers extensive parts of the hill slopes with Douglas fir (*Pseudotsuga menziesii*) trees scattered through it. Bracken fern (*Pteridium esculentum*) is also prominent along the steep, lakeshore scarp that extends from Beach Point southwards to Mick O'Day Creek. An area of tall Eucalypts (*Eucalyptus* sp.) grows on a part of this scarp. The top of the peninsula is almost flat sloping gently to the southwest. The trig point at the top is 415 m, about 107 m above Lake Wakatipu.

This whole area has potential to be developed for a wide range of activities that would benefit the public and Real Journeys. It would also benefit the neighbours by removing the problem trees and shrubs.

This document explores possible scenarios that could be carried out over time. It discusses time frames and methods to accomplish the suggested ideas.

VISION

It is 2030.

The Douglas fir that was once spreading across the peninsula has long gone, the best of it milled producing wonderful building timber the rest poisoned or chipped providing a mulch for the replanting of native trees and shrubs. A few dead trees can still be seen rising up out of the native vegetation that now covers much of the northern part and steeper western slopes of the peninsula. Other plant pests such as hawthorn, broom, gorse and sweet briar have also vanished. On the eastern side, nearer the Colonel's Homestead the open park-like theme has been continued with colourful exotic species gradually merging with the native plants.

Sheep graze peacefully from time to time on the fenced southern half of the peninsula, quite unfazed by the numerous walkers and bikers that traverse the numerous tracks.

Numerous families come over especially to picnic along the lake edge and enjoy the spectacular birdlife and bush walks. A group of volunteers regularly monitoring predator trap lines.

Mountain biking is popular especially since the head of the lake track was opened up allowing biking from Queenstown to Walter Peak and for the adventurous a recent mountain trail up McKinleys Creek into the Lochy and back over Cascade Saddle.

Real Journeys has had to increase its Earnslaw schedule to cope with the increasing usage of the area.

The attractiveness of Walter Peak has been enhanced as a unique place to visit in close proximity to the rapidly growing town (city) of Queenstown.

Topography and existing vegetation

The Peninsula

At least two old lake shore terraces can be found most obvious along the steep northwest shoreline but also around Beach point and above Beach Bay. From the lake the land rises to gently sloping plateau where there is a trig point (415 m) 107 m above the lake and about one third of the way down the peninsula. From here the land slopes gently south to a broad, flattish plain bounded by the Beach Bay Road on one side and by the steep lake scarp on the other.

The western scarp is covered with bracken fern through which native shrubs are emerging. A stand of Eucalypts grows about halfway along the scarp. Scattered wilding conifers are spreading into this area and would eventually invade the scarp to the detriment of the native vegetation if not controlled. Small remnant patches of native vegetation are still found around the north and east sides of the peninsula but close to the shore woody weeds such as blackberry, broom and gorse dominate between tall Douglas fir.

Douglas fir dominates all the northern third of the peninsula more or less up to the trig point and spreading. Small patches of open grassland, bracken fernland and a few native shrubs can be found amongst the firs and grassland surrounds the trig. A group of Eucalypts grow along part of the Beach Bay shore towering over a weedy mix of other exotic species.

South of the Trig is primarily grassland except on steeper slopes where bracken fernland with native shrubs including patches of manuka occurs but with invading Douglas fir.

The DoC Reserve and Eastern Lake Shore

Much of this area contains a plantation of very tall, large Douglas fir, redwood (*Sequoiadendron giganteum*), macrocarpa (*Cupressus macrocarpa*) and a long-needled pine species, probably *Pinus ponderosa*. A small creek that flows from the steep mountainside above periodically floods through this forest but is generally contained by a low, bulldozed berm. Above the forest bracken slopes drop fairly steeply to the lake shore track and a grassy area. Shrubs and broom, partially contained by herbicide cover this rocky slope. A few large Douglas fir dot the north facing slope.

The lake shore curves eastwards lined by poplar, willow and other exotic trees and shrubs including broom.



1. Walter Peak, the Colonels Homestead, Beach Bay and the wooded peninsula terminating in Beach point.



2. The Colonels House and DoC Conservation Land to the left with poplars and Douglas firs on left hand slopes.



3. Closer view of the eastern shore line.



4 & 5. The large, mature conifers in the Conservation Land and the dense broom undergrowth.



6. The eastern lake shore between the lake and the track.



7. Another view of the plantation on Conservation land.

A Management Plan

The peninsula can be roughly divided into six management zones that merge with one another. The eastern Conservation land is a seventh zone. Map 1 indicates the approximate boundaries of each zone. The zones are numbered in order of their suggested management so that zone 1 along the lake shore to Beach Point would be first priority, zone 2 and possibly 3a next and so on. Zone seven would be last apart from management of the plantation trees that may fit in with some work suggested for other zones that is the milling of the timber trees.

Zone 1 – Shoreline to Beach Point

This zone is mainly shoreline below the road but includes some areas above the road that have similar shrubby vegetation, bracken and/or young Douglas fir. Apart from a medium sized kowhai and a few other remnant native plants, most confined to the rocky, shoreline promontories, this area is almost totally exotic pest species including broom, gorse, blackberry, Himalayan honeysuckle (*Leycesteria formosa*), red currant (*Ribes rubrum*) and patches of native bracken fern.



8. Exotic plant pests under Eucalypts above and below the road to Beach Point. Himalayan honeysuckle in the foreground with grey willow (*Salix cinerea*) behind.



9. Kowhai and broom on the lake shore.

Above the road towards Beach Point is an area of young Douglas fir that has been included in this zone. On the rocky point stunted gorse and sweet briar grow.

Suggested management of this area is to mulch all areas of exotic shrubland, bracken and blackberry including under the Eucalypts and remove all Douglas fir including several large trees. Care will be required around the rocky outcrops along the lake edge where a number of native species grow. It may be necessary to mark these before mulching commences. On the point, spray or preferably remove gorse and briar, painting the stumps so that regrowth will not occur and remove Douglas fir to create an open, grassed area for viewing and picnicking.

Once mulched then the area should be planted with native species. It is an area that would lend itself to public planting days supported by the Wakatipu Reforestation Trust. Planting could take place autumn through winter into spring and staged over a number of years if necessary. Some weed control by spraying would be required for 3 or 4 years until the plants were well established.



10. Shoreline south of pump shed. Mulch edge, remove a few Douglas fir between road and lake.



11. Rocky Beach Point with broom, gorse, briar and Douglas fir.

Zone 2- West Lake Scarp

The lake scarp is relatively steep and covered in bracken with scattered native shrubs and Douglas fir, the latter dense towards Beach Point. A copse of open Eucalypts grows about half way down this zone.

Management here would be to remove or poison and leave standing, all Douglas fir and other weed species such as scattered broom, gorse and briar then to leave the area to slowly regenerate with native species. Once the cover of natives becomes dense then seeding Douglas fir and other exotic species will not be a problem. The native planting that has taken place further south and that will have occurred in zone 1 will provide an increasing seed source for good regeneration.

In the future one or both old lake terraces could be used for walking/bike trails for public use. It may even be useful to open trails up for ease of management for tree removal. Douglas fir could be removed by hand or more readily by spot spraying from the air. Blanket spraying is not recommended as there are good pockets of manuka and other native species present that are part of the regeneration of this zone.

If there are large patches of broom (not seen) then these could be left, unless on an edge, as native species will eventually regenerate under and suppress the broom in the long term.

Zone 3a – Upper Slopes

This zone can be treated in a similar way to Zone 2. Remove scattered Douglas fir and hawthorn, leave broom and gorse unless on an edge and take care to preserve the manuka patches. Existing tracks should be kept open for access and future trails.



12 & 13. Scattered Douglas fir in bracken fernland with broom and manuka patches



14. Upper west side showing scattered Douglas fir and a eucalypt in bracken fernland.

Zone 3b – Upper Slopes north end

This is a continuation of 3a but with more dense to complete cover of Douglas fir. The suggestion for this area is to gradually remove the Douglas fir back from the upper grassed edges. The view from the trig is becoming spoiled by the fringe firs that protrude into the skyline. Areas of open grass and bracken in the fir stands should be retained and enlarged with all broom removed (sprayed or hand cut at ground level). A small gully below the water tanks would make a good area for replanting with native species. If the fir is removed in stages then replanting with native species such as mountain and/or red beech could also be staged with some public involvement as suggested for zone 1.



15 & 16. Open areas in zone 3b with bracken and broom edges. These places could be mulched as for zone 1 or the bracken left and broom removed. Young Douglas fir removed at the same time.

Zone 4 – Grassland

The grassland along the peninsula crest allows panoramic views that will be improved by removing the fringing firs. It leads nicely southwards down to the paddocks below and makes for easy walking. The only management in this zone is to remove broom from along the edges. Refer photo 15.

About halfway down the grassland from the trig point is a stand of cabbage trees (*Cordyline australis*) and just below this is a dampish area that is probably wet during parts of the year. This could make a very nice wetland in the future, planted up with wetland species and providing a more diverse habitat for birds and insects.

Zone 5 – Dense Douglas fir on lower slopes

The tallest and oldest Douglas fir occupies a band lining the mid and lower slopes of the peninsula on the western side of Beach Bay. It is suggested that this band be retained meantime until zone 1 has been completed, that is mulched, trees removed and planted. There is possibly millable timber here that may offset the cost of removal. If it is found to be uneconomic to mill then another option is to aerial spray and leave standing. Planting could then take place under standing, dead trees once the leaves had dropped off. Beech trees would do well with such protection during establishment.



17. Dense, mature Douglas fir in zone 5 rising above the Eucalypts.

Zone 6 – Park Land

A small area of the hill slope nearest the buildings and presently mature Douglas fir could be planted in colourful introduced species as a transition zone between the existing garden landscape around the Colonels House and the planned native forest along the peninsula. Open planting of mainly deciduous species is suggested.



18. Part of zone 6 incorporating the historic Douglas fir at right.

Zone 7 – Conservation Land

This zone incorporates a track around to the Walter Peak Station jetty that separates the lake shore vegetation from the hill slopes and plantation above.

The lake shore contains a line of poplars that are particularly spectacular now, in their autumn colours. They adjoin the colourful Colonels garden and fit in nicely with this and should be retained. They are becoming old trees that will eventually over so it is suggested that any gaps be planted with more poplars to continue this theme. The willows are attractive at present but the habit of crack willow (*Salix fragilis*) where twigs and branches readily break off and regrow causes problems. They could be removed in due course. Broom could also be removed from this area and some planting of native shrubs used for replanting under the poplars. (Refer photo 6)

The hill slopes above are mainly bracken covered except for a small area of grassland near the bottom. They will eventually regenerate with native species if the scattered Douglas fir are removed.

The plantation contains some magnificent trees. A mix of Douglas fir, redwoods, pine trees, macrocarpa and another *Lawsoniana* sp. The pine trees (*P. ponderosa?*) form a row along the back (east side) of the forest. A group of redwoods form the front with some Douglas fir. Underneath in places is a dense thicket of broom and other weeds. (Refer photos 4,5 & 7).

The Douglas fir should be removed as their seeds spread widely causing significant problems in this environment. They are such straight, tall trees that they should have value for timber production. It appears that they could be removed without affecting the appearance of the plantation significantly

apart from becoming more open. Replanting with redwoods and similar species would ensure that the life of this plantation is extended. Milling could take place during the period of the winter servicing of the Earnslaw so that there is minimal disruption to tourist services.



19. Poplars, crack willow and broom along the shore with scattered Douglas fir in bracken fernland behind.

Discussion

This plan envisages each zone being done sequentially 1 to 7 but this may not be the most economical or most efficient and it may be that parts of several zones are done at the same time if equipment is available. If a mulcher is being used in zone 1 for instance then it could be useful to use the machine while it is at Walter Peak to mulch all areas that need mulching such as the plantation understorey, zone 7 lakeshore broom and broom and other weeds in zone 3b. Likewise with milling timber, it would be sensible to mill all millable timber at one time such as may be found in zones 1 & 5 as well as 7.

There has been little indication in this plan of possible future bike/walk tracks but it would be sensible to have a plan for these in total so that as work is being done accommodation is made for these tracks. Probably most tracks would follow existing tracks or old lines.

Native species suitable for planting in each area is still to come.



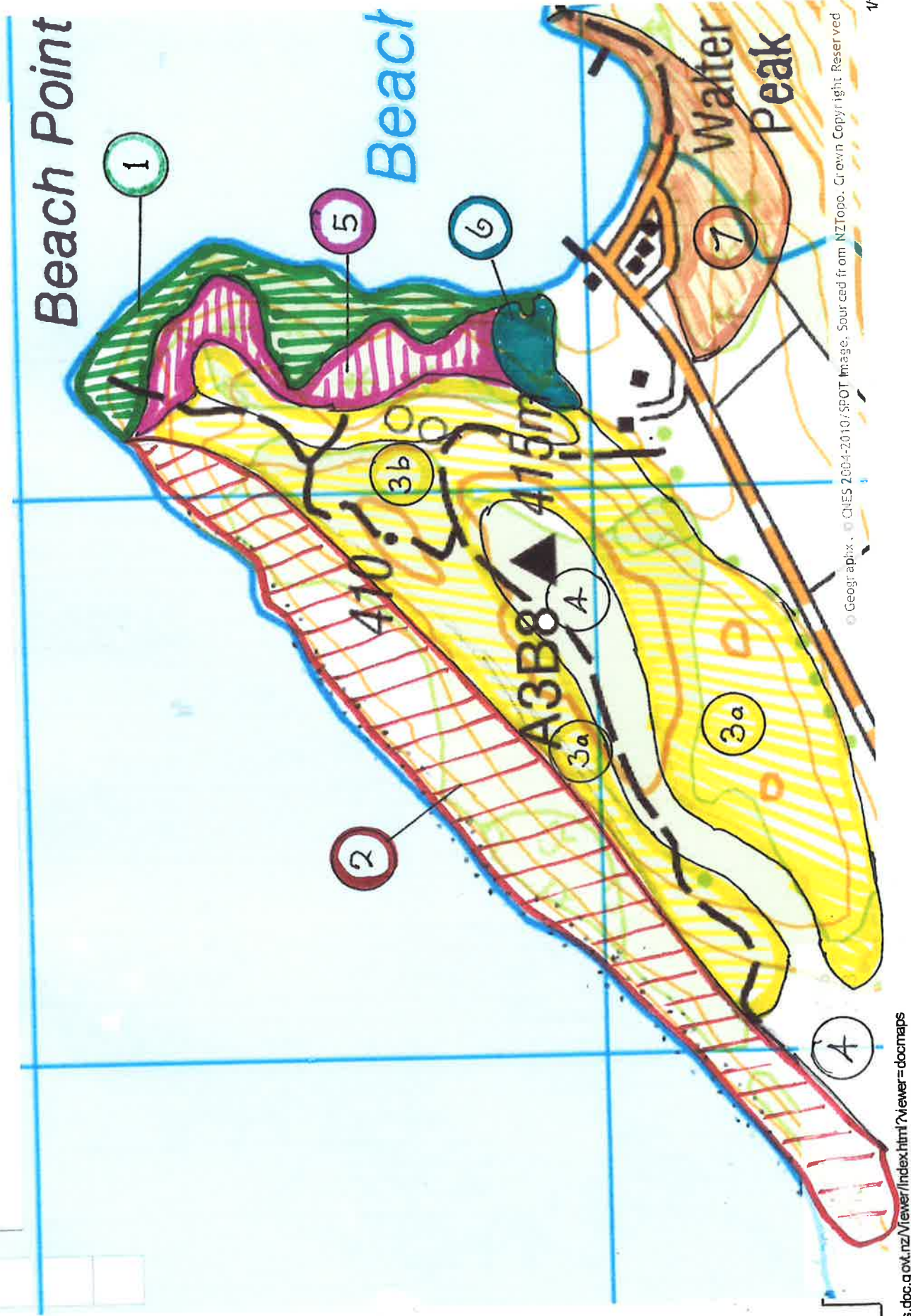
20. Broom under Eucalypts on the lake shore.

**Suggested native plant species to plant along the Beach Bay to Beach Point Track,
Walter Peak**

Plant species	Common name	Lakeshore below track	Hillslopes above track	Beach Point
Podocarpus cunninghamii	mt. totara	5	15	
Cordyline australis	<u>cabbage tree</u>	20		
Aristotelia fruticosa	mt.wineberry	10		
Aristotelia serrata	wineberry		10	
Carmichaelia petriei	native broom	10		
Carpodetus serratus	marble leaf		5	
Coprosma acerosa				10
Coprosma crassifolius		20		10
Coprosma lucida		10	10	
Coprosma propinqua		40	20	10
Coprosma rugosa		40	10	10
Coprosma virescens		20		5
Corokia cotoneaster	korokia	40		
Griselinia littoralis	broadleaf	20	30	
Hebe salicifolia	koromiko	10		
Leptospermum scoparium	manuka	40		
Lophomyrtus obcordata	myrtle	10		
Melicope simplex		5		
Melicytus alpinus	porcupine shrub			10
Metrosideros umbellata	southern rata	10		
Myrsine australis	mapou, red matipo	20		
Myrsine divaricata	weeping mapou	10		5
Fuscospora cliffortioides	mt. beech		100	
Fuscospora fusca	red beech		150	
Olearia fragrantissima	tree daisy	5		
Olearia lineata	tree daisy	15		
Olearia odorata	tree daisy	10		
Olearia fimbriata	tree daisy	10		
Olearia avicenniifolia	tree daisy	10		
Plagianthus regius	manatu	10		
Pseudopanax ferox	fierce landcewood	15		5
Pseudopanax crassifolius	lancewood	10		
Pseudopanax colensoi var. ternatus	three finger	10		
Pittosporum eugenioides	tarata, lemonwood		30	
Pittosporum tenuifolium	<u>kohuhu</u>	40	40	
Sophora microphylla	<u>kowhai</u>	25		
Phormium cookianum	mt. Flax			10
Phormium tenax	swamp flax	40		
Cordarteria richardii	toitoti	50		

Hill slope list is included to take in any larger areas cleared above the track and to plant where the distance between track and lake is wide (so behind the lake shore fringe). Plants listed for the point can be tucked into small pockets of soil in the rock after removal of gorse, broom and briar. About 1000 plants as a first stage. 3000 - 5000 may be required depending on the area cleared. All listed plants are found around lake Wakatipu.

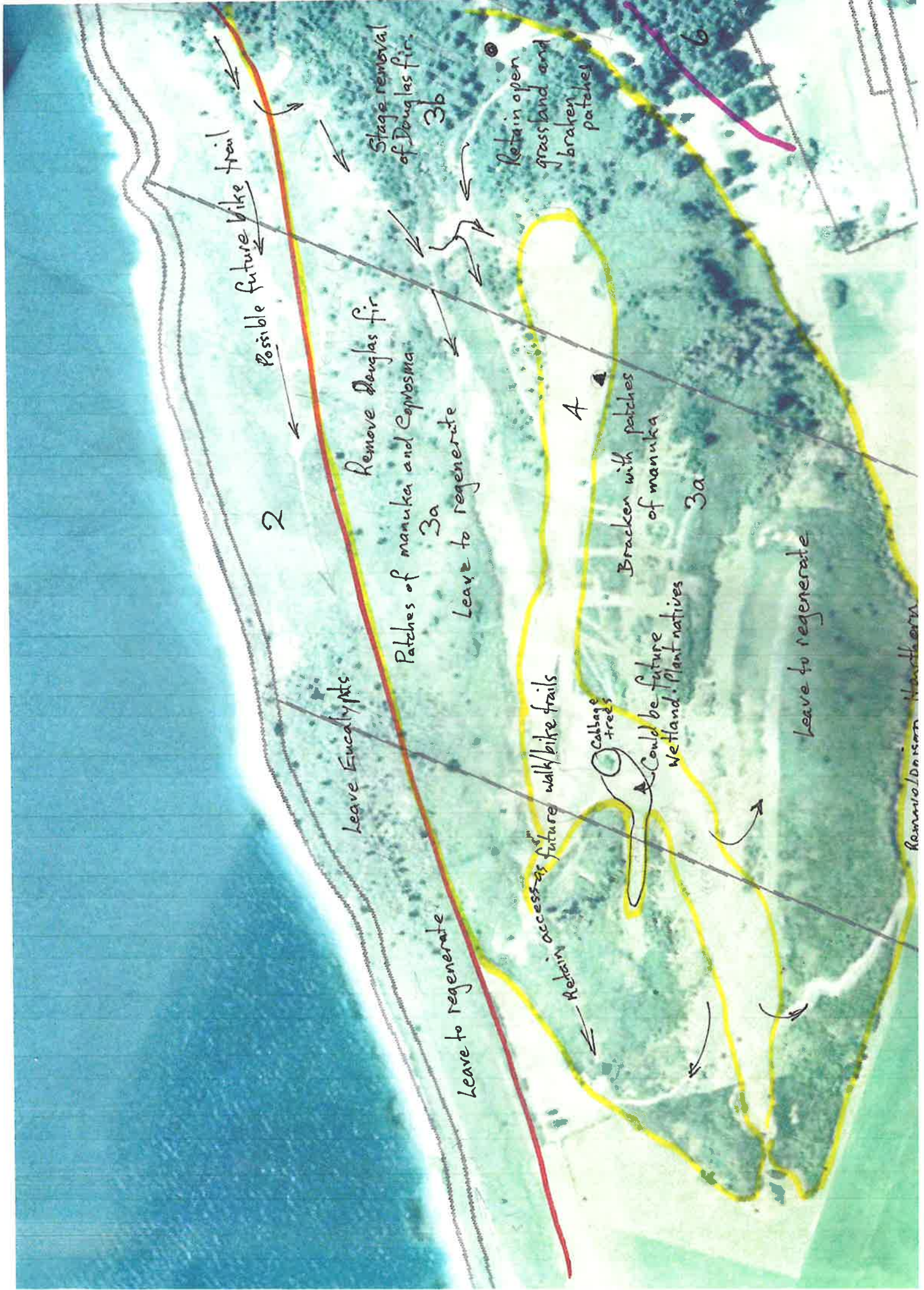
MAP 1. Showing the seven suggested management zones for managing the Beach Point Peninsula and Department of Conservation land at Walter Peak.



© Geographix, © CNES 2004-2010 / SPOT Image. Sourced from NZTopo. Crown Copyright Reserved

Map 2.





Possible future bike trail

2

Leave Eucalypts

Remove Douglas fir
Patches of manuka and Coprosma

3a

Leave to regenerate

Leave to regenerate

Retain access as future walk/bike trails

Cabbage trees

Could be future Wetland. Plant natives

A

Bracken with patches of manuka

3a

Leave to regenerate

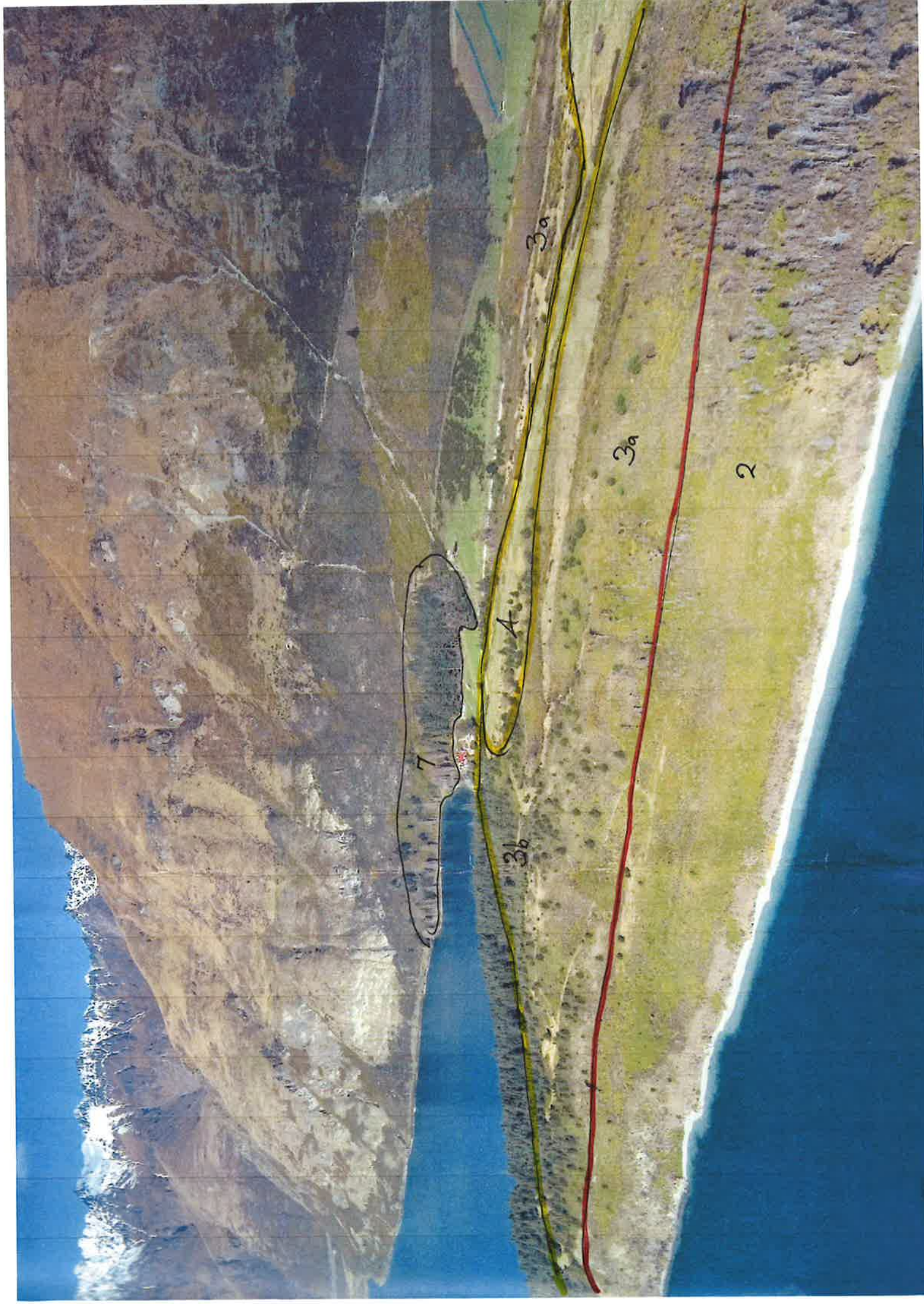
Stage removal of Douglas fir

3b

Retain open grassland and bracken patches

6

Removal/Disposal of manuka



7

A

3a

3a

2

3b



3a

retain grassland

Leave to regenerate

Retain access ways

Remove all Douglas fir

Retain Eucalypts

3a

2

Leave to regenerate

4