

Assessment of Risk to Landscape Characteristics from Subdivision and Land Use and Development Activities

Table of Contents

Risk Assessment Outline	IV
1.0 Introduction to the Risk Assessment	1
1.1 Purpose	1
1.2 Overall Scope and Methodology	1
2.0 Part 1: Risk Assessment Framework of Subdivision and Land Use and Development Activities	3
2.1 Scope and Methodology for Part 1	3
2.2 Low-Lying Land and High-Lying Land	8
2.3 Coastal Land and Open Sea	10
2.4 Rivers, Estuaries and Riparian Land	15
2.5 Low Vegetation and Landcover	20
2.6 High Vegetation	24
2.7 Urban Cover	28
2.8 Part 1 Summary: Overview of Risky Activities Across Landcovers	32
3.0 Part 2: Locational Risk Assessments for Golden Bay	33
3.1 Scope and Methodology for Part 2	33
3.1 Specific Locations	36
Big River Estuary	36
Anatori River	40
Ruatanuiwha Inlet	44
Wainui Bay Inlet	48
Mount Burnett	52
Parapara Peak	56
Mount Evans	60
Boulder Lake	64
Lake Stanley	68
Collingwood	72
Tarakohe Cliffs	76
Farewell Spit	80
Aorere River Gorge and Tributaries	84
Te Waikoropupu Springs	88
Paynes Ford	92
The Grove	96
4.0 Part 3: TRMP Chapter and Section Review	100
4.1 Scope and Methodology for Part 3	100
4.2 Chapter and Section Assessments	104

Chapter 5: Site Amenity Effects	105
Section 6.2: Land Effects from Urban Growth	106
Section 6.3: Urban Infrastructure Services	107
Section 6.4: Coastal Urban Development	108
Section 6.6: Land for Commercial Activities	109
Section 6.7: Settlement Character and Design	110
Section 6.8: Richmond	111
Section 6.11: Takaka-Eastern Golden Bay	112
Section 6.15: Mapua-Ruby Bay	113
Chapter 7: Rural Environment Effects	114
Chapter 8: Margins of Rivers, Lakes, Wetlands and the Coast	115
Chapter 9: Landscape	116
Section 11.2: Effects on the Environment	119
Chapter 16: General Rules	120
Section 17.5: Rural 1 Zone Rules	121
Section 17.6: Rural 2 Zone Rules	122
Section 17.7: Rural 3 Zone Rules	123
Section 17.8: Rural Residential Rules	124
Section 17.9: Open Space Rules	125
Section 18.2: Landscape Priority Areas	126
Section 18.5: Land Disturbance Areas	127
Section 18.6: Quarry Area	128
Section 18.11: Coastal Environment Area	129
Section 21.2: Protection of Habitats and Ecosystems	130
Section 21.3: Protection of Landscapes, Seascapes and Natural Features	131
Section 22.1: Protection of Values	132
Section 23.1: Natural Hazards	133
Chapter 25: Coastal Marine Area Rules	134
Section 27.4: Impacts on Water Quality	135
Section 27.6: Natural Character, Landscape, Cultural, Recreational and Amenity Values	136
Section 28.2: Dams and Weirs	137
4.3 Part 3 Summary: TRMP Review Overview	138
5.0 Conclusion	140
6.0 Bibliography	142
7.0 Appendices	144
7.1 Appendix A: Landform and Landcover Divisions	144
7.2 Appendix B: Landforms and Landcovers applied to Golden Bay Locations including Overview Maps	147

Risk Assessment Outline

This outline guides the reader through the Risk Assessment's methodology and findings. The Risk Assessment (the RA) is to be read in conjunction with the July 2015 report of the Small Group (the SG).

1 The landscape protection process

The context of the RA will be briefly explained before going into its content. There are three general steps in assessing and protecting landscapes:

- 1) Identify those landscapes and features in need of protection
- 2) Identify the risks of certain activities to those identified landscapes and features
- 3) Propose responses to protect the identified landscapes and features from the risky activities

The SG's July 2015 report fulfils step 1 of this process, identifying those landscapes and features in need of protection. The RA fulfils step 2 of this process, and the upcoming Plan Change is step 3 of this process.

The RA has three Parts. Part 1 assesses risks of activities to landscape characteristics, Part 2 applies the risk assessment methodology developed in Part 1 to some locations in Golden Bay, and Part 3 assesses how effective the TRMP is in protecting landscape characteristics from risky activities.

2 Part 1 of the Risk Assessment

Part 1 of the RA performs the core work of assessing risk. It simply assesses:

- a) The risk of various subdivision, land use and development activities;
- b) On landscape characteristics;
- c) Of different types of land areas.

Note: a landscape characteristic is any characteristic that comprises a landscape, from the presence of trees and water, to the historical knowledge associated with that landscape.

Part 1 does not produce findings per se, so much as a methodology for assessing risks. The "findings" of Part 1 are for generic activities, generic landscape characteristics, and generic types of land areas. This methodology can then be applied in future for specific activities and contexts.

However, a simple example can involve assessing the various effects of constructing a new telecommunications tower on:

- a) A bare hilltop; or
- b) A forested hilltop; or
- c) A valley covered with tussock grass; or
- d) A valley covered with forest.

The same activity will have difference visual and non-visual effects depending on how high the activity occurs and what surrounds the activity site. It is intuitive that constructing a telecommunications tower will have the largest visual effect on an unforested hill and the RA confirms this.

3 Part 2 of the Risk Assessment

Part 2 of the RA applies the methodology developed in Part 1, as an example of how Golden Bay can be assessed. This is called a locational risk assessment, as it is a risk assessment with a specific locational context.

Each locational risk assessment has three maps which describe the locational context:

- 1) Map of landform (elevation and topography); and
- 2) Map of landcover (type of land area e.g. forested or barren); and
- 3) Map of the July 2015 report's ONFL overlay recommendations.

Its purpose is to place individual risk assessments into the context of the whole site. Returning to the earlier example of constructing a new telecommunications tower:

Even if the hilltop in question was bare, the surrounding hill range may be forested. There may also be important local and iwi associations with the site to take into consideration. The surrounding landscape characteristics play a role in how an activity affects a site.

4 Part 3 of the Risk Assessment

Part 3 assesses how effective the TRMP is in protecting landscape characteristics from risky activities. 31 of the TRMP's landscape-relevant chapters and sections were assessed against four general criteria:

- a) Relevance to the RMA's provisions and NZCPS's policies;
- b) Application of landscape assessment and protection methodology;
- c) Management of specific risky activities;
- d) Relevance of the provision to landscape protection.

Each chapter and section review was summarised. This summary clarified the relevance and necessity of provisions, the degree of internal fragmentation of policies and rules, and which risky activities were either accounted for or managed and where.

Part 3 found that landscape protection from the TRMP's policy chapters was adequate but the landscape protection from the TRMP's rule chapters was inadequate.

1.0 Introduction to the Risk Assessment

1.1 Purpose

There are three stages to advancing landscape protection: Stage 1 requires landscape areas to be identified and assessed for the constitutive characteristics; Stage 2 requires the risks of human activities to those specific landscape areas and characteristics to be identified; and Stage 3 proposed a response to those identified risks, usually in the form of a Plan Change.

This Risk Assessment comprises Stage 2, and:

- a) Assesses the risks of subdivision and land use and development activities on landscape characteristics in generalised types of land areas; and
- b) Assesses the risks of subdivision and land use and development activities on landscape characteristics with reference to potential ONF and ONL overlay locations in Golden Bay; and
- c) Reviews the capacity for risk management in existing TRMP chapters and sections.

The Risk Assessment follows the July 2015 report published by the Small Group which identified potential outstanding natural features (ONF) and outstanding natural landscapes (ONL) overlay locations in Golden Bay. The assessment is an intermediary step following the findings of the July 2015 report and the preparation of the Draft Plan Change (DPC) and the Draft evaluation report under section 32 of the RMA (Draft Section 32 evaluation report). It provides a partial evidential basis and explanation for the proposed provisions in the ensuing DPC. The full evidential basis for the expected draft provisions, including evaluations of the risks of landscape protection methods to subdivision and land use and development activities will come through the Draft Section 32 evaluation report itself.

1.2 Overall Scope and Methodology

Part 1 of the Risk Assessment assess the various risks of land use and development activities on landscape characteristics via several risk criteria. These included the expected range of effects to landscape characteristics that may collectively constitute ONFs or ONLs. The division of Golden Bay into six generalised landforms and landcover provides only a convenient grouping for land areas and environment effects on landscape characteristics. These divisions should not be considered a technical assessment of Golden Bay's landforms or landscape areas.

Part 2 of the Risk Assessment takes the assessment methodology developed in Part 1 and applies it to specific locations in Golden Bay. Some of the locations assessed were drawn from the July 2015 report and these locational risk assessments provide context for Tasman

District. Each locational risk assessment includes an assessment of associative characteristics, which can only be properly assessed in the context of a specific location.

Part 3 of the Risk assessments involves a review of TRMP landscape-relevant provisions as possible risk mitigation measures for the risks identified in Part 1. Landscape-relevant provisions in the TRMP are assessed for their effectiveness in protecting landscape from the risks of land use activities. In light of the risks identified, and this review of existing risk mitigation measures, the draft provisions for the DPC are proposed to respond to any existing inadequacies.

2.0 Part 1: Risk Assessment Framework of Subdivision and Land Use and Development Activities

2.1 Scope and Methodology for Part 1

Part 1 assesses the effects of different subdivision and land use and development activities on different landscape characteristics. The effects on landscape characteristics will vary area by area.

There are three risk criteria used in Part 1 of the Risk Assessment to measure the risk of land use and development activities on landscape characteristics:

- 1) Landforms and Landcovers
- 2) Subdivision and Land Use and Development Activities
- 3) Environmental Effects

1 Landforms and Landcovers

The assessment is organised through six generalised landforms and landcovers:

- 1) Low-Lying Land and High-Lying Land
This landform describes the elevation and slope of terrestrial land. Low-lying land generally consists of plains and valleys, whereas high-lying land generally consists of hills, plateaus and mountains.
- 2) Coastal Land and Open Sea
This landcover describes land near the ocean and the ocean itself. The open sea and coast generally consist of open water through to land 200 metres inland of mean high water springs, and including coastal vegetation.
- 3) Rivers, Estuaries and Riparian Land
This landcover describes land near rivers and estuaries. Rivers and Estuaries generally consist of freshwater bodies and where they connect to the open sea, and land and vegetation bordering those water bodies.
- 4) Low Vegetation and Landcover
This landcover describes land that has neither forest cover or urban cover. Low vegetation and landcover generally encompasses most rural land uses such as dairy farms and orchards, uncovered gravel or rock and tussock grassland.

5) High Vegetation

This landcover describes land that has forest cover or shrubland cover. High vegetation generally encompasses vegetation such as indigenous and exotic forest, shrublands and scrub, and plantation forestry.

6) Urban Cover

This landcover describes land that has been significantly modified. Urban cover generally includes land covered by housing and commercial buildings, roads, and urban parks.

2 Subdivision and Land Use and Development Activities

The assessments under each landform and landcover are further divided into five subdivision and land use and development activities:

1) Subdivision

Subdivision is the legal and physical division of one landholding into smaller landholdings or the amalgamation of multiple landholdings into one landholding. Changes to lot sizes can vary hugely, especially at rural-urban boundaries and where rural land is rezoned as urban land.

2) Earthworks

Earthworks involve modifying land surfaces through removing and relocating earth, soil and rock. Earthworks are commonly used to level land or create elevated sloped land, or prepare land for construction of a building, structure or transport infrastructure.

3) Land Surface Modification

Land surface modification involves alterations to the surface of the land excluding vegetation modification, earthworks and coastal occupation. These modifications can include building siting and construction, agricultural and horticultural practices, fencing and tracking, construction of network facilities, signage and lighting, and landscaping.

4) Vegetation Modification

Vegetation modification involves the removal and addition of vegetation. This does not include vegetation modification on land near bodies of water.

5) Coastal Occupation

Coastal occupation involves any activity within or affecting bodies of water. This includes vegetation modification on land near bodies of water, and generally closely correlates with the coastal marine area and coastal environment area.

3 Environmental Effects

The assessments of environmental effects under each land use and development activity are done under three subcategories:

1) Visual and Natural Characteristics

These characteristics describe the material composition of landscapes and how they are perceived by people, in the absence of historical and local knowledge. There are three criteria within visual and natural characteristics:

a) **Natural features** (the presence of natural or rural character)

- The absence of man-made modifications; with the exception of
- The presence of man-made modifications typical of a rural environment (e.g. grasslands, wire fencing and barns)
- The presence of high vegetation (e.g. forest and shrubland)
- The presence of native vegetation

b) **Transient qualities** (cyclical change such as weather and season)

- Variations in landform
- Variations in weather patterns and sun exposure
- Variations in flora and fauna present
- Presence of the coast and open sea or other water body

c) **Aesthetic qualities** (the visual impact of an area or activity)

- The lack of physical fragmentation of landcover
- The change to how the landscape “looks”

2) Associative Characteristics

This characteristic describes the social and historical composition of landscapes and how they are perceived by people. These include local history and shared knowledge of natural features, and iwi historical and cultural associations. The criteria only assess whether substantive change is likely, not how substantive change might be.

Note: Associative characteristics are only assessed in the context of a specific location or landscape. Part 1 general assessments will not consider associative characteristics. Part 2 contains the locational risk assessments.

a) **Existing features**

- Is a notable or important natural feature present?
- Is a notable or important man-made feature present?
- Is an iwi historical or cultural association present?

b) **Existing activities**

- Is there a longstanding land use or development activity?
- Is there a longstanding absence of land use or development activities?

3) Scale and Likelihood

This characteristic describes the physical and temporal scale of subdivision and land use and development activities. Physical scale concerns the size of an event or its effects. Temporal scale concerns the time period used and the likelihood of certain events occurring during that time period. The time period used in the risk assessment is 50 years, roughly two generations.

- The likelihood of any single event occurring
- The material size of the event and its effects
- The likelihood of multiple events occurring over 50 years
- The overall material size of those events and their effects over 50 years
- The likely degree of clustering of those multiple events

Material scale is described by this ranking system:

- Substantial
- Large
- Moderate
- Small
- Insignificant

Likelihood is described by this ranking system:

- Highly likely
- Likely
- Neither likely nor unlikely
- Unlikely
- Highly unlikely

An **overall assessment** is made through a risk matrix, taking into account the material scale of effects and the overall likelihood of their occurrence. This matrix divides activities into three risk groupings: low (green), moderate (yellow) and high (orange). The water-based landcovers Coastal Land and Open Sea, and Rivers, Estuaries and Riparian Vegetation have

larger fields for their high risk activities as recognition of their importance and vulnerability compared to non-water based landcovers.

2.2 Low-lying Land and High-Lying Land

The influence of landform (elevation and slope) is limited to the scale and likelihood, and associative characteristics of the environmental effects from various subdivision and land use and development activities.

1 Material Scale

Generally, the higher up above sea level an activity occurs, the more visually pronounced the landscape characteristic changes will be. This is simply because these changes are visible from more locations within and around the affected landscape than if those activities and changes occurred at a lower elevation.

For example, the removal of vegetation. After a patch of native bush on a hill is removed, the newly exposed ground and now-patchy vegetation is highly visible from the valleys below.

2 Likelihood and Temporal Scale

Generally, the higher up and the steeper the slope of the land concerned, the less likely that activities are likely to occur on that land. This is due to the difficulty of accessing that land and the realities of land ownership; the majority of elevated and steep land within Golden Bay is DOC estate and far fewer subdivision and land use and development activities can occur within DOC estate than on non-DOC land.

Generally, the steeper the slope of the land concerned, the more severe the changes to the landscape characteristics can be. For example, earthworks-related effects such as slippage and erosion are both more likely to occur and more likely to be more severe than at lower slopes.

3 Associative Characteristics

Generally, the higher up above sea level an activity occurs, the more likely an area with local associations will be affected. For example, many hills, mountains and cliff faces in Golden Bay are widely recognised within local communities as distinct natural features, important for historical and cultural reasons.

4 Particularly Risky Activities

Certain activities are particularly risky to landscape characteristics at high elevations or slopes; earthworks and vegetation modification.

Earthworks is a particularly risky land use activity as it risks leaving highly visible scars on the hills or mountains, and can cause or exacerbate erosion on steep land.

Vegetation modification is particularly risky when vegetation is removed, leaving highly visible patchy or fragmented areas of vegetation. The removal of vegetation at high elevations or slopes can also cause or exacerbate erosion.

2.3 Coastal Land and Open Sea

This landcover describes land near the ocean and the ocean itself. The open sea and coast generally consist of open water through to land and vegetation 200 metres inland of mean high water springs.

Subdivision	<p><u>Visual and Natural Characteristics</u></p> <ul style="list-style-type: none"> - Natural features: subdivision signals a change in the property boundaries on land surrounding water bodies. The degree of change can vary from minimal (such as only raising some wire fences) to substantial (such as increasing the amount and intensity of housing or significantly modifying vegetation). - Transient qualities: subdivision may signal the cumulative reduction of both flora and fauna if natural habitat is modified or removed following subdivision. - Aesthetic qualities: subdivision that produces allotments where property boundaries do not follow landform or water bodies visually divides the landscape. Delineating such property boundaries can fragment vegetation.
	<p><u>Scale and Likelihood</u></p> <ul style="list-style-type: none"> - A single event is likely to occur. - The size of a single event is likely to be small to moderate. - Multiple events are likely to occur over 50 years. - The overall size of these events is likely to be small to moderate. - Subdivision events are neither likely nor unlikely to cluster.

Earthworks	<p><u>Visual and Natural Characteristics</u></p> <ul style="list-style-type: none"> - Natural features: earthworks will expose bare earth and remove vegetation; these will likely be remediated or developed over. However, poorly managed earthworks greatly risk siltation of nearby water bodies, and causing or exacerbating erosion. - Transient qualities: poorly managed earthworks risk causing or exacerbating erosion, and damaging water bodies and their respective ecosystems. This damage can be highly visible and long-lasting. - Aesthetic qualities: earthworks temporarily make many environments very aesthetically unappealing by exposing bare earth and disrupting the natural landforms and landcovers. Poorly managed earthworks risk causing permanent visual effects.
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	<p><u>Scale and Likelihood</u></p> <ul style="list-style-type: none"> - A single event is likely to occur. - The size of a single event is generally small but adjacent land and water bodies can be affected if earthworks are poorly managed. - Multiple events are likely to occur over 50 years. - The overall size of these events over 50 years is likely to be small to moderate. - Earthwork events are neither likely nor unlikely to cluster.
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Land Surface Modification	<p><u>Visual and Natural Characteristics</u></p> <ul style="list-style-type: none"> - Natural features: modifications typical of rural environments, such as wire fencing, tracks, and farm buildings may have less impact than modifications typical of urban environments, such as concrete and metal landscaping, and substantial lighting. Modifications may have higher effects in environments particularly vulnerable to change and intervention, such as wetlands and - Transient qualities: modifications can cumulatively alter flora and fauna as habitat is modified or removed. - Aesthetic qualities: Modifications typical of rural environments may have less visual impact than modifications typical of urban environments. Modifications may have higher effects in environments particularly vulnerable to change and intervention, such as dunes and wetlands.
	<p><u>Scale and Likelihood</u></p> <ul style="list-style-type: none"> - A single event is neither likely nor unlikely to occur. - The size of a single event will vary from small to substantial. - Multiple events are likely to occur over 50 years. - The overall size of these events over 50 years is likely to be small to substantial. - Modification events are neither likely nor unlikely to cluster.

Vegetation Modification	<p><u>Visual and Natural Characteristics</u></p> <ul style="list-style-type: none"> - Natural features: vegetation removal will reduce the presence of both exotic and native vegetation, and risk exposing bare ground. Vegetation planting can increase the presence of exotic or native vegetation, and cover bare ground. Vegetation that is particularly at risk from modification include dunes and wetland vegetation. - Transient qualities: vegetation removal can significantly reduce both flora and fauna as habitat is removed, as significantly change sun cover. Vegetation planting can increase both flora and fauna, and change sun cover. Coastal vegetation is a fundamental component of coastal land, and its modification can be more severe than modification of vegetation not in or adjacent to water bodies. - Aesthetic qualities: vegetation removal risks fragmenting existing patches of vegetation. Vegetation planting will contribute positively to the visual coherence of on-site vegetation, and particularly for vegetation within or adjacent to a water body.
	<p><u>Scale and Likelihood</u></p> <ul style="list-style-type: none"> - A single removal event is unlikely for vegetation within or adjacent to water bodies, and is neither likely nor unlikely for land near water bodies. - A single planting event is neither likely nor unlikely. - The size of a single event is likely to be small to substantial. - Multiple events are likely to occur over 50 years. - The overall size of these events over 50 years is likely to be small to substantial. - Modification events are likely to cluster.

Coastal Occupation	<p><u>Visual and Natural Characteristics</u></p> <ul style="list-style-type: none"> - Natural features: any such man-made modification, particularly those that increase human access to the water such as jetties, wharves and ramps, can significantly affect the natural character of the coastal environment. Such effects are proportionate to the material size of the modification and the distance from the intertidal zone. - Transient qualities: larger man-made modification, particularly those that manage coastal erosion such as groynes and sea walls, can significantly affect natural coastal processes and their local ecosystems. Such effects are proportionate to the material size of the modification and the distance from the intertidal zone. - Aesthetic qualities: larger man-made modification risks visually fragmenting the coastal environment. Such modifications include wharves and ports, and sea walls and groynes. Their effects are proportionate to the material size of the modification and the distance from the intertidal zone. Certain coastal occupations in the open sea jut up above the water and risk being seen from the coast, including platforms, oil rigs and marine farming facilities.
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	<p><u>Scale and Likelihood</u></p> <ul style="list-style-type: none">- A single event is neither likely nor unlikely to occur.- The size of a single event can vary from small to substantial.- Multiple events are neither likely nor unlikely to occur over 50 years.- The overall size of these events can vary from small to substantial.- Modification events are neither likely nor unlikely to cluster.
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Risk Assessment Overview for Coastal Land and Open Sea

Likelihood of Event	Scale of Consequences				
	<u>Insignificant</u>	<u>Small</u>	<u>Moderate</u>	<u>Large</u>	<u>Substantial</u>
<u>Highly Unlikely</u>				Vegetation removal for protected trees	
<u>Unlikely</u>				Vegetation removal within a water body	
<u>Neither Likely nor Unlikely</u>		Small land surface modifications	Vegetation removal near a water body Small coastal occupations	Large land surface modifications	Large coastal occupations
<u>Likely</u>		Well managed earthworks Vegetation removal for unprotected vegetation	Subdivision		Poorly managed earthworks
<u>Highly Likely</u>					

2.4 Rivers, Estuaries and Riparian Vegetation

This landcover describes land near rivers and estuaries. Rivers and Estuaries generally consist of freshwater bodies and where they connect to the open sea, and land and vegetation bordering those water bodies.

Subdivision	<p><u>Visual and Natural Characteristics</u></p> <ul style="list-style-type: none"> - Natural features: subdivision signals a change in the property boundaries on land surrounding water bodies. The degree of change can vary from minimal (such as only raising some wire fences) to substantial (such as increasing the amount and intensity of housing or significantly modifying vegetation). - Transient qualities: subdivision may signal the cumulative reduction of both flora and fauna if natural habitat is modified or removed following subdivision. - Aesthetic qualities: subdivision that produces allotments where property boundaries do not follow landform or water bodies visually divides the landscape. Delineating such property boundaries can fragment vegetation.
	<p><u>Scale and Likelihood</u></p> <ul style="list-style-type: none"> - A single event is likely to occur. - The size of a single event is likely to be small to moderate. - Multiple events are likely to occur over 50 years. - The overall size of these events is likely to be small to moderate. - Subdivision events are neither likely nor unlikely to cluster.

Earthworks	<p><u>Visual and Natural Characteristics</u></p> <ul style="list-style-type: none"> - Natural features: earthworks will expose bare earth and remove vegetation; these will likely be remediated or developed over. However, poorly managed earthworks greatly risk siltation of nearby water bodies, and causing or exacerbating erosion. - Transient qualities: poorly managed earthworks risk causing or exacerbating erosion, and damaging water bodies and their respective ecosystems. This damage can be highly visible and long-lasting. - Aesthetic qualities: earthworks temporarily make many environments very aesthetically unappealing by exposing bare earth and disrupting the natural landforms and landcovers. Poorly managed earthworks risk causing permanent visual effects.
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	<p><u>Scale and Likelihood</u></p> <ul style="list-style-type: none"> - A single event is likely to occur. - The size of a single event is generally small but adjacent land and water bodies can be affected if earthworks are poorly managed. - Multiple events are likely to occur over 50 years. - The overall size of these events over 50 years is likely to be small to moderate. - Earthwork events are neither likely nor unlikely to cluster.
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Land Surface Modification	<p><u>Visual and Natural Characteristics</u></p> <ul style="list-style-type: none"> - Natural features: modifications typical of rural environments, such as wire fencing along riparian zones and wooden bridges over rivers may have less impact than modifications typical of urban environments, such as concrete landscaping along riparian zones and concrete and metal bridges over rivers. - Transient qualities: modifications can cumulatively alter flora and fauna as habitat is modified or removed. Modifications such as water course rerouting or installing culverts can substantially change the water courses themselves. - Aesthetic qualities: Modifications typical of rural environments may have less visual impact than modifications typical of urban environments. However, certain activities such as dairy farming, hydroelectric facilities and mining operations can significantly affect both water courses and local water quality.
	<p><u>Scale and Likelihood</u></p> <ul style="list-style-type: none"> - A single event is neither likely nor unlikely to occur. - The size of a single event will vary from small to substantial. - Multiple events are likely to occur over 50 years. - The overall size of these events over 50 years is likely to be small to substantial. - Modification events are highly likely to cluster.

Vegetation Modification	<p><u>Visual and Natural Characteristics</u></p> <ul style="list-style-type: none"> - Natural features: vegetation removal will reduce the presence of both exotic and native vegetation, and risk exposing bare ground. Vegetation planting can increase the presence of exotic or native vegetation, and cover bare ground. - Transient qualities: vegetation removal can significantly reduce both flora and fauna as habitat is removed, as significantly change sun cover. Vegetation planting can increase both flora and fauna, and change sun cover. Riparian vegetation is a fundamental component of rivers and other freshwater bodies, and its modification can be more severe than modification of vegetation not in or adjacent to water bodies. - Aesthetic qualities: vegetation removal risks fragmenting existing patches of vegetation. Vegetation planting will contribute positively to the visual coherence of on-site vegetation, and particularly for vegetation within or adjacent to a water body.
	<p><u>Scale and Likelihood</u></p> <ul style="list-style-type: none"> - A single removal event is unlikely for vegetation within or adjacent to water bodies, and is neither likely nor unlikely for land near water bodies. - A single planting event is neither likely nor unlikely. - The size of a single event is likely to be small to moderate. - Multiple events are likely to occur over 50 years. - The overall size of these events over 50 years is likely to be small to moderate. - Modification events are likely to cluster.

Coastal Occupation	<p><u>Visual and Natural Characteristics</u></p> <ul style="list-style-type: none"> - Natural features: In-water modifications can have a substantial effect; water course modifications such as rerouting and culverts can affect water flow and increase flood risk, whereas water access modifications such as jetties and wharves risk can increase water pollution. - Transient qualities: modifications such as groynes, sea walls and reclamation can substantially affect water-related cycles and processes, including erosion. These and other modifications can also harm local flora and fauna as habitat is modified or removed. - Aesthetic qualities: Water course modification may have a substantial visual effect, and may fragment the water course itself. Activities with substantial effects include constructing culverts and hydroelectric facilities.
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	<p><u>Scale and Likelihood</u></p> <ul style="list-style-type: none">- A single event is neither likely nor unlikely to occur.- The size of a single event can vary from small to substantial.- Multiple events are neither likely nor unlikely to occur over 50 years.- The overall size of these events can vary from small to substantial.- Modification events are neither likely nor unlikely to cluster.
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Risk Assessment Overview for Rivers, Estuaries and Riparian Vegetation					
Likelihood of Event	Scale of Consequences				
	<u>Insignificant</u>	<u>Small</u>	<u>Moderate</u>	<u>Large</u>	<u>Substantial</u>
<u>Highly Unlikely</u>				Vegetation removal for protected trees	
<u>Unlikely</u>			Vegetation removal within a water body		
<u>Neither Likely nor Unlikely</u>		Small land surface modifications Vegetation removal for unprotected vegetation	Vegetation removal near a water body Vegetation planting Small coastal occupations	Large land surface modifications	Large coastal occupations
<u>Likely</u>		Well managed earthworks	Subdivision		Poorly managed earthworks
<u>Highly Likely</u>					

2.5 Low Vegetation and Landcover

This landcover describes land that has neither forest cover or urban cover. Low vegetation and landcover generally encompasses most rural land uses such as dairy farms and orchards, uncovered gravel or rock and tussock grassland.

Subdivision	<p><u>Visual and Natural Characteristics</u></p> <ul style="list-style-type: none"> - Natural features: subdivision signals a change in local activity, potentially from agricultural and horticultural practices to rural residential (e.g. lifestyle blocks or more intense rural accommodation). - Transient qualities: subdivision may signal the cumulative reduction of both flora and fauna if natural habitat is modified or removed following subdivision. - Aesthetic qualities: subdivision signals the cumulative fragmentation of land via property boundaries. Property boundaries that do not follow water bodies or landform risk visually fragmenting the land.
	<p><u>Scale and Likelihood</u></p> <ul style="list-style-type: none"> - A single event is more likely to occur the closer the location is to an urban area. - The size of a single event is more likely to be larger the closer the location is to an urban area. - Multiple events are more likely to occur the closer the location is to an urban area. - The overall size of these events over 50 years is likely to be low to moderate. - Subdivision events are highly likely to cluster around existing urban areas.
Earthworks	<p><u>Visual and Natural Characteristics</u></p> <ul style="list-style-type: none"> - Natural features: earthworks will expose bare earth and remove vegetation; these will likely be remediated or developed over. - Transient qualities: earthworks will change the landform of a site, but this change is likely to be temporary and eventually remediated or developed over. - Aesthetic qualities: earthworks temporarily make many environments very aesthetically unappealing by exposing bare earth and disrupting the natural landforms and landcovers. Poorly managed earthworks risk causing permanent visual effects.

	<p><u>Scale and Likelihood</u></p> <ul style="list-style-type: none"> - A single event is likely to occur. - The size of a single event is generally small but adjacent land can be affected if earthworks are poorly managed. - Multiple events are highly likely to occur over 50 years. - The overall size of these events over 50 years is likely to be small or insignificant. - Earthwork events are neither likely nor unlikely to cluster.
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Land Surface Modification	<p><u>Visual and Natural Characteristics</u></p> <ul style="list-style-type: none"> - Natural features: modifications will generally cumulatively increase the presence of man-made modifications typical of rural environments, such as fences and tracks, barns and low density housing, and agricultural and horticultural practices. - Transient qualities: modifications will cumulatively alter flora and fauna as habitat is modified or removed, and dependent on agricultural or horticultural practices. - Aesthetic qualities: modifications typical of rural environments or conservation land contribute positively to visual coherence low vegetation and landcover. Physically large modifications such as electricity or telecoms facilities will have a significant negative impact.
	<p><u>Scale and Likelihood</u></p> <ul style="list-style-type: none"> - A single event is likely to occur, with the exception of large electricity, water and telecoms facilities. - The size of a single event will vary from small to substantial. - Multiple events are likely to occur over 50 years. - The overall size of these events over 50 years is likely to be moderate. - Modification events are highly likely to cluster.

Vegetation Modification	<p><u>Visual and Natural Characteristics</u></p> <ul style="list-style-type: none"> - Natural features: vegetation removal will reduce the presence of both exotic and native vegetation, and risk exposing bare ground. Vegetation planting may increase the presence of exotic or native vegetation, and cover bare ground. Horticulture or plantation forestry may significantly modify on-site vegetation. - Transient qualities: vegetation removal can reduce both flora and fauna, as habitat is removed, as well as change sun cover. Vegetation planting can increase both flora and fauna, and change sun cover. - Aesthetic qualities: vegetation removal risks fragmenting existing patches of vegetation. Vegetation planting, particularly for horticulture or plantation forestry will contribute positively to the visual coherence of on-site vegetation.
	<p><u>Scale and Likelihood</u></p> <ul style="list-style-type: none"> - A single removal event is likely to occur for unprotected or exotic vegetation and highly unlikely for protected trees. - A single planting event is likely. Plantation forestry is highly unlikely. - The size of a single event will vary from small to substantial, depending on the vegetation affected. Plantation forestry will have a substantial effect. - Multiple events are likely to occur over 50 years with the general effect of slight vegetation loss. - The overall size of these events over 50 years is likely to be small or insignificant. - Modification events are neither likely nor unlikely to cluster.

Coastal Occupation	<p><u>Visual and Natural Characteristics</u></p> <p>Not applicable</p>
	<p><u>Scale and Likelihood</u></p> <p>Not applicable</p>

Risk Assessment Overview for Low Vegetation and Landcover

Likelihood of Event	Scale of Consequences				
	<u>Insignificant</u>	<u>Small</u>	<u>Moderate</u>	<u>Large</u>	<u>Substantial</u>
<u>Highly Unlikely</u>				Vegetation removal for protected trees	Plantation forestry
<u>Unlikely</u>					Large land surface modifications
<u>Neither Likely nor Unlikely</u>			Subdivision not near urban areas		
<u>Likely</u>		Well managed earthworks Vegetation removal for unprotected vegetation Vegetation planting		Subdivision near urban areas Poorly managed earthworks	Large subdivisions near urban areas
<u>Highly Likely</u>			Small land surface modifications		

2.6 High Vegetation

This landcover describes land that has forest cover or shrubland cover. High vegetation generally encompasses vegetation such as indigenous and exotic forest, shrublands and scrub, and plantation forestry.

Subdivision	<p><u>Visual and Natural Characteristics</u></p> <ul style="list-style-type: none"> - Natural features: a subdivision signals a change in local activity, potentially from plantation forestry or conservation to agriculture or horticulture. This can involve the mass clearance of high vegetation into low vegetation, or the selective planting of high vegetation to delineate property boundaries. - Transient qualities: subdivision may signal the cumulative reduction of both flora and fauna if natural habitat is modified or removed following subdivision. - Aesthetic qualities: subdivision signals the cumulative fragmentation of land via property boundaries. High vegetation can be used to delineate such boundaries, also cause significant fragmentation of existing vegetation.
	<p><u>Scale and Likelihood</u></p> <ul style="list-style-type: none"> - A single event is neither likely nor unlikely to occur on private land but is highly unlikely to occur on public land. - The size of a single event is likely to be moderate to substantial. - Multiple events are unlikely to occur over 50 years. - The overall size of these events over 50 years is likely to be small to substantial. - Subdivision events are unlikely to cluster.
Earthworks	<p><u>Visual and Natural Characteristics</u></p> <ul style="list-style-type: none"> - Natural features: earthworks will expose bare earth and remove vegetation. The effects will be highly visible and long-lasting, even if remediated or planted over. - Transient qualities: earthworks will change the landform of a site, as well as reduce flora and fauna by modifying or removing forested habitat. - Aesthetic qualities: earthworks will fragment and remove some existing areas of vegetation. The effects will be highly visible and long-lasting, even if remediated or planted over. Poorly managed earthworks risk causing permanent visual effects.

	<p><u>Scale and Likelihood</u></p> <ul style="list-style-type: none"> - A single event is neither likely nor unlikely to occur on private land but is highly unlikely to occur on public land. - The size of a single event is generally small but adjacent land can be affected if earthworks are poorly managed. - Multiple events are unlikely to occur over 50 years. - The overall size of these events over 50 years is likely to be small but the material impact can be substantial. - Earthwork events are likely to cluster within and around subdivision events.
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Land Surface Modification	<p><u>Visual and Natural Characteristics</u></p> <ul style="list-style-type: none"> - Natural features: modifications can substantially increase the presence and visibility of man-made modifications as generally few exist. Expected modifications can include signs, fences, tracks, and huts. Unexpected modifications can include electricity, water, mining and telecoms facilities. - Transient qualities: modifications can cumulatively alter flora and fauna as habitat is modified or removed. - Aesthetic qualities: in high vegetation, any man-made modification reduces the natural character of the landscape. The visual effect of modifications will depend on the visibility of the modifications and the density of high vegetation surrounding or concealing those modifications. The higher the visibility for the former and the lower the density of the latter, the higher the visual effect.
	<p><u>Scale and Likelihood</u></p> <ul style="list-style-type: none"> - A single event is unlikely to occur on private land and highly unlikely to occur on public land, with an exception for health and safety modifications. - The material size of a single modification is likely to be small to moderate but the visual effect is likely to be moderate to substantial. - Multiple events are unlikely to occur on private land and highly unlikely to occur on public land over 50 years. - The overall material size of these events is likely to be small to moderate but the visual effect is likely to be moderate to substantial. - Modification events are unlikely to cluster.

Vegetation Modification	<p><u>Visual and Natural Characteristics</u></p> <ul style="list-style-type: none"> - Natural features: vegetation removal will reduce the presence of exotic or native vegetation, and risks exposing bare ground. Vegetation planting will increase the presence of exotic or native vegetation, and can cover bare ground. Plantation forestry risks changing a mixed forest to a monoculture forest. - Transient qualities: vegetation removal can reduce both flora and fauna, as habitat is removed, as well as change sun cover. Vegetation planting can increase both flora and fauna, and change sun cover. Plantation forestry can significantly reduce the feeling of transience, particularly if evergreens are monocultured. - Aesthetic qualities: vegetation removal will invariably fragment existing high vegetation and risk exposing features or modifications that lie behind or within existing high vegetation. Planting of high vegetation selectively risks highlighting artificial property boundaries.
	<p><u>Scale and Likelihood</u></p> <ul style="list-style-type: none"> - A single removal event on private land is neither likely nor unlikely whereas removal on public land is highly unlikely. - A single planting event is likely. Plantation forestry is highly unlikely. - The material size of a single event will vary from small to substantial but the visual effect will likely be moderate to substantial. - Multiple events are unlikely to occur on private land and highly unlikely to occur on public land over 50 years. - The overall size of these events over 50 years is likely to be small to moderate. - Modification events are unlikely to cluster.

Coastal Occupation	<p><u>Visual and Natural Characteristics</u></p> <p>Not applicable</p>
	<p><u>Scale and Likelihood</u></p> <p>Not applicable</p>

Risk Assessment Overview for High Vegetation					
Likelihood of Event	Scale of Consequences				
	<u>Insignificant</u>	<u>Small</u>	<u>Moderate</u>	<u>Large</u>	<u>Substantial</u>
<u>Highly Unlikely</u>		Well managed earthworks on public land	Small land surface modifications on public land	Poorly managed earthworks on public land	Subdivision on public land Large land surface modifications on public land Vegetation removal on public land Plantation forestry
<u>Unlikely</u>		Small land surface modifications on private land		Large land surface modifications on private land	
<u>Neither Likely nor Unlikely</u>		Well managed earthworks on private land	Vegetation removal on private land	Subdivision on private land Poorly managed earthworks on private land	
<u>Likely</u>			Vegetation planting on private or public land		
<u>Highly Likely</u>					

2.7 Urban Cover

This landcover describes land that has been significantly modified. Urban cover generally includes land covered by housing and commercial buildings, roads, and urban parks.

Subdivision	<p><u>Visual and Natural Characteristics</u></p> <ul style="list-style-type: none"> - Natural features: subdivision signals the cumulative increase of the physical scope of the urban environment and its man-made modifications. - Transient qualities: subdivision signals the cumulative reduction of both flora and fauna as natural habitat is modified or removed following subdivision. - Aesthetic qualities: subdivision signals the cumulative expansion of the urban aesthetic, such as the use of man-made materials (metals, concrete and glass), use of non-natural colours and the cumulative fragmentation of natural boundaries with property boundaries.
	<p><u>Scale and Likelihood</u></p> <ul style="list-style-type: none"> - A single event is highly likely to occur in urban areas and on nearby rural land. - The size of a single event is generally small but is highly likely to be larger at the rural-urban boundary. - Multiple events are highly likely to occur over 50 years. - The overall size of these events over 50 years is likely to be substantial. - Subdivision events are highly likely to cluster around existing subdivisions.

Earthworks	<p><u>Visual and Natural Characteristics</u></p> <ul style="list-style-type: none"> - Natural features: earthworks will expose bare earth and remove vegetation; the former will likely be remediated or developed over but the latter may not be replaced within an urban environment. - Transient qualities: earthworks will change the landform of a site, but this change is likely to be temporary and eventually remediated or developed over. - Aesthetic qualities: earthworks temporarily make many environments very aesthetically unappealing by exposing bare earth and disrupting the natural landforms and landcovers. Poorly managed earthworks risk causing permanent visual effects.
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	<p><u>Scale and Likelihood</u></p> <ul style="list-style-type: none"> - A single event is highly likely to occur. - The size of a single event is generally small but adjacent land can be affected if earthworks are poorly managed. - Multiple events are highly likely to occur over 50 years. - The overall size of these events over 50 years is likely to be small or insignificant. - Earthwork events are likely to cluster within and around subdivision events.
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Land Surface Modification	<p><u>Visual and Natural Characteristics</u></p> <ul style="list-style-type: none"> - Natural features: modifications will cumulatively increase the presence of man-made modifications typical of urban environments rather than rural environments, with the exception of large electricity, water and telecoms facilities. - Transient qualities: modifications will cumulatively reduce flora and fauna as habitat is modified or removed, and sun cover may be altered significantly by tall buildings. - Aesthetic qualities: modifications are the foundation of urban environments, and modifications involving man-made materials (e.g. metals, concrete and glass) and non-natural colours contribute positively to the coherence of urban cover.
	<p><u>Scale and Likelihood</u></p> <ul style="list-style-type: none"> - A single event is highly likely to occur, with the exception of large electricity, water and telecoms facilities. - The size of a single event will vary from small to substantial. - Multiple events are highly likely to occur over 50 years. - The overall size of these events over 50 years is likely to be substantial. - Modification events are highly likely to cluster.

Vegetation Modification	<p><u>Visual and Natural Characteristics</u></p> <ul style="list-style-type: none"> - Natural features: vegetation removal will reduce the presence of both exotic and native vegetation, and risks exposing bare ground. Vegetation planting may increase the presence of exotic or native vegetation, and cover bare ground. - Transient qualities: vegetation removal can reduce both flora and fauna, as habitat is removed. Vegetation planting can slightly increase both flora and fauna. - Aesthetic qualities: vegetation removal risks fragmenting existing patches of vegetation, especially where significant areas of vegetation still exist in urban areas. Outside of such areas, only the removal or modification of prominent trees will have a significant aesthetic impact.
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	<p><u>Scale and Likelihood</u></p> <ul style="list-style-type: none"> - A single removal event is likely to occur for unprotected trees and highly unlikely for protected trees. - A single planting event is likely. - The size of a single event will vary from small to substantial, depending on the vegetation affected. - Multiple events are likely to occur over 50 years with the general effect of vegetation loss. - The overall size of these events over 50 years is likely to be small or insignificant. - Modification events are neither likely nor unlikely to cluster.
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Coastal Occupation	<p><u>Visual and Natural Characteristics</u></p> <p>Not applicable</p>
	<p><u>Scale and Likelihood</u></p> <p>Not applicable</p>

Risk Assessment Overview for Urban Cover

Likelihood of Event	Scale of Consequences				
	<u>Insignificant</u>	<u>Small</u>	<u>Moderate</u>	<u>Large</u>	<u>Substantial</u>
<u>Highly Unlikely</u>				Vegetation removal for protected trees	
<u>Unlikely</u>				Large land surface modifications	
<u>Neither Likely nor Unlikely</u>					
<u>Likely</u>		Subdivision in an urban area Vegetation removal for unprotected vegetation Vegetation planting			
<u>Highly Likely</u>		Well managed earthworks in an urban area Small land surface modifications	Well managed earthworks near the rural-urban boundary	Subdivision near the rural-urban boundary Poorly managed earthworks	Large subdivisions near the rural-urban boundary

2.8 Part 1 Summary: Overview of Risky Activities Across Landcovers

Table of risky activities organised by level of risk and landcover

Refer to Part 1 landform and landcover assessments for further information landforms and landcovers.

	Coastal Land and Open Sea	Rivers, Estuaries and Riparian Vegetation	Low Vegetation and Landcover	High Vegetation	Urban Cover
Low Risk Activities				Well managed earthworks on public land. Small land surface modifications on public land. Small land surface modifications on private land.	
Moderate Risk Activities	Well managed earthworks . Small land surface modifications . Vegetation removal for unprotected vegetation. Vegetation removal for protected trees. Vegetation removal within a water body. Small coastal occupations .	Well managed earthworks . Small land surface modifications . Vegetation removal for unprotected vegetation. Vegetation removal for protected trees. Vegetation removal within a water body. Vegetation removal near a water body. Vegetation planting. Small coastal occupations .	Subdivision not near urban areas. Well managed earthworks . Large land surface modifications . Vegetation removal for unprotected vegetation. Vegetation removal for protected trees. Vegetation planting. Plantation forestry .	Subdivision on public or private land. Poorly managed earthworks on public or private land. Well managed earthworks on private land. Large land surface modifications on public or private land. Vegetation removal on public or private land. Vegetation planting on private or public land. Plantation forestry .	Subdivision in an urban area. Small land surface modifications . Vegetation removal for unprotected vegetation. Vegetation planting. Well managed earthworks in an urban area.
High Risk Activities	Subdivision . Poorly managed earthworks . Large land surface modifications . Large coastal occupations .	Subdivision . Poorly managed earthworks . Large land surface modifications . Large coastal occupations .	Large subdivisions near urban areas. Subdivision near urban areas. Poorly managed earthworks . Small land surface modifications .		Large subdivisions near the rural-urban boundary. Subdivision near the rural-urban boundary. Poorly managed earthworks . Well managed earthworks near the rural-urban boundary.

3.0 Part 2: Locational Risk Assessment for Golden Bay

3.1 Scope and Methodology for Part 2

Part 2 applies the risk assessment through 16 specific locations in Golden Bay, including five ONFs identified in the Small Group July 2015 report. This assessment includes the assessment on natural and visual characteristics, and associative characteristics. This is called a locational risk assessment and it provides an overview of the effects of subdivision and land use and development on landscape characteristics for a specific location.

1 Locational Risk Assessments

The 16 locations are organised in 5 general groups as follows:

a) Rivers and Estuaries

- Big River Estuary
- Anatori River
- Ruataniwha Inlet
- Wainui Bay Inlet

b) Mountains

- Mount Burnett
- Parapara Peak
- Mount Evans

c) Inland Lakes

- Boulder Lake
- Lake Stanley

d) Coastal Locations

- Collingwood
- Tarakohe Cliffs

e) Identified ONFs

- Farewell Spit
- Aorere River Gorge and Tributaries
- Te Waikoropupu Springs
- Paynes Ford
- The Grove

2 Reference Tables and Maps

There are two overview reference tables and one overview reference map used:

1. Map of Specific Locations
2. Table of specific locations and their applicable landforms and landcovers
3. Table of risky activities organised by level of risk and landcover

The “Table of specific locations and their applicable landforms and landcovers” is summarised for each locational risk assessment but the section 2.8 “Overview of Risky Activities Across Landcovers” (refer page 31) is not. The latter table needs to be referred to directly to check the specific risks to each location.

3 Specific Location Maps

Each location risk assessment has three maps describing the Specific Location. These maps show the three layers of information needed

1. Map 1 – Landform
2. Map 2 – Landcover
3. Map 3 – Small Group July 2015 Report ONFL Overlays

Table of specific locations and their applicable landforms and landcovers

		Low-Lying Land	High-Lying Land	Coastal Land and Open Sea	Rivers, Estuaries and Riparian Vegetation	Low Vegetation and Landcover	High Vegetation	Urban Cover
Rivers and Estuaries	Big River Estuary	X	X		X	X	X	
	Anatori River	X			X	X	X	
	Ruataniwha Inlet	X			X	X		X
	Wainui Bay Inlet	X	X		X	X	X	
Mountains	Mount Burnett		X				X	X
	Parapara Peak		X			X	X	
	Mount Evans		X				X	
Inland Lakes	Boulder Lake		X		X	X	X	
	Lake Stanley		X		X	X	X	
Coastal Locations	Collingwood	X			X	X		X
	Tarakohe Cliffs	X	X	X		X		X
Identified ONFs	Farewell Spit	X		X		X	X	
	Aorere River Gorge and Tributaries	X	X		X	X	X	
	Te Waikoropupu Springs	X			X		X	
	Paynes Ford	X			X	X	X	
	The Grove		X				X	

3.2 Specific Locations

Big River Estuary

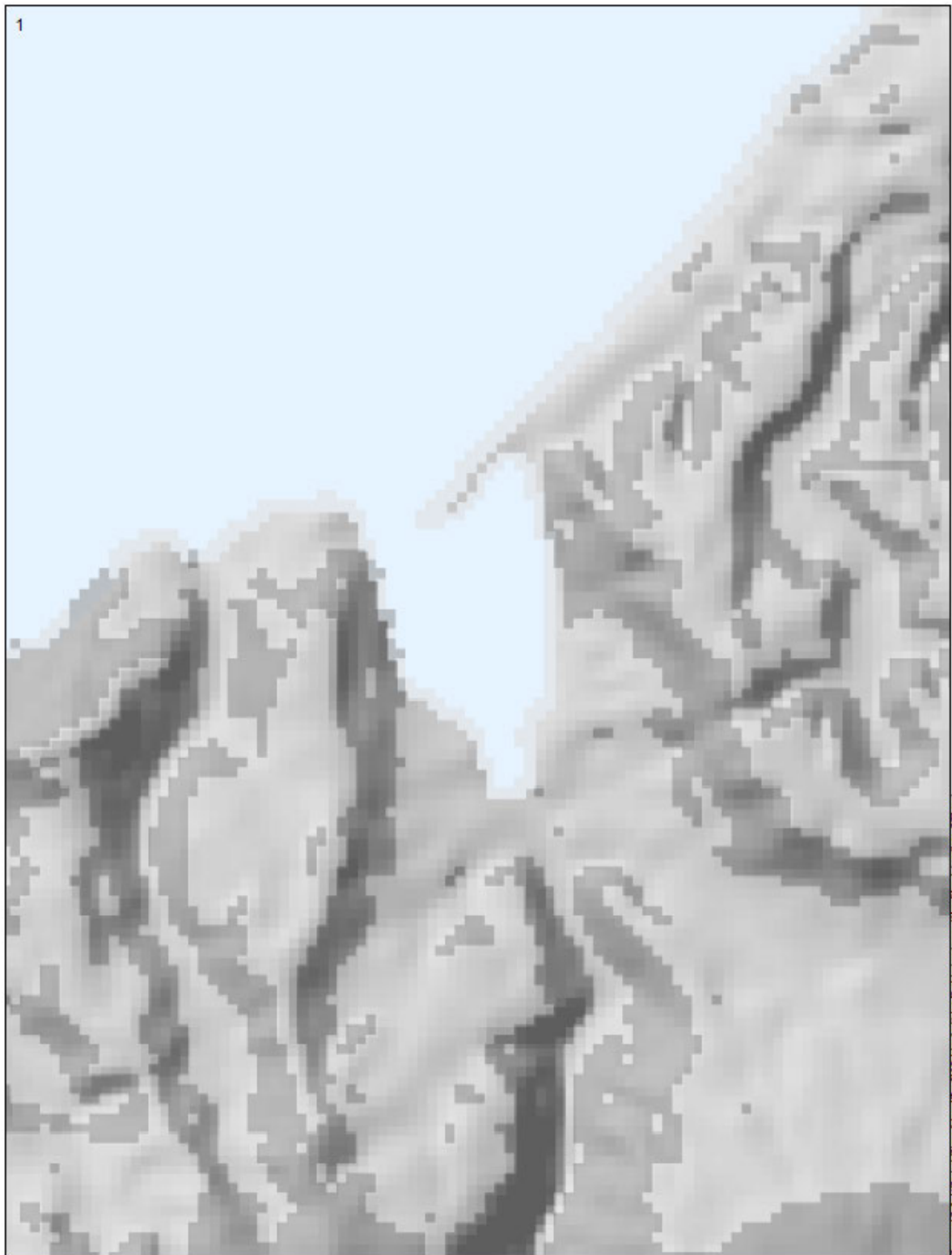
Location Group: Rivers and Estuaries

Landform	Low Elevation	Yes
	High Elevation	Yes
Landcover	Coastal Land and Open Sea	-
	Rivers, Estuaries and Riparian Land	Yes
	Low Vegetation and Landcover	Yes
	High Vegetation	Yes
	Urban Cover	-

Associative Characteristics	<p><u>Existing Features</u></p> <ul style="list-style-type: none"> - The location itself is a notable natural feature. - The location has no notable man-made features. - There are iwi associations recognised in the deeds of settlement. - There are known iwi associations with this location.
	<p><u>Existing Activities</u></p> <ul style="list-style-type: none"> - The location's primary land use activity is conservation. - The location's surrounding land use activity farming.

Big River Estuary



Map 1 – Landform




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Land Form
Big River Estuary

Elevation and Slope

 Hills and Mountains	 Plains and Valleys
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0 0.15 0.3
km

 N

The map is an approximate representation only and should not be used to determine the location or size of items shown, or to identify legal boundaries. Caution is advised based on land information. New Zealand. © Crown Copyright Resurveyed. Date 10/02/19

Anatori River

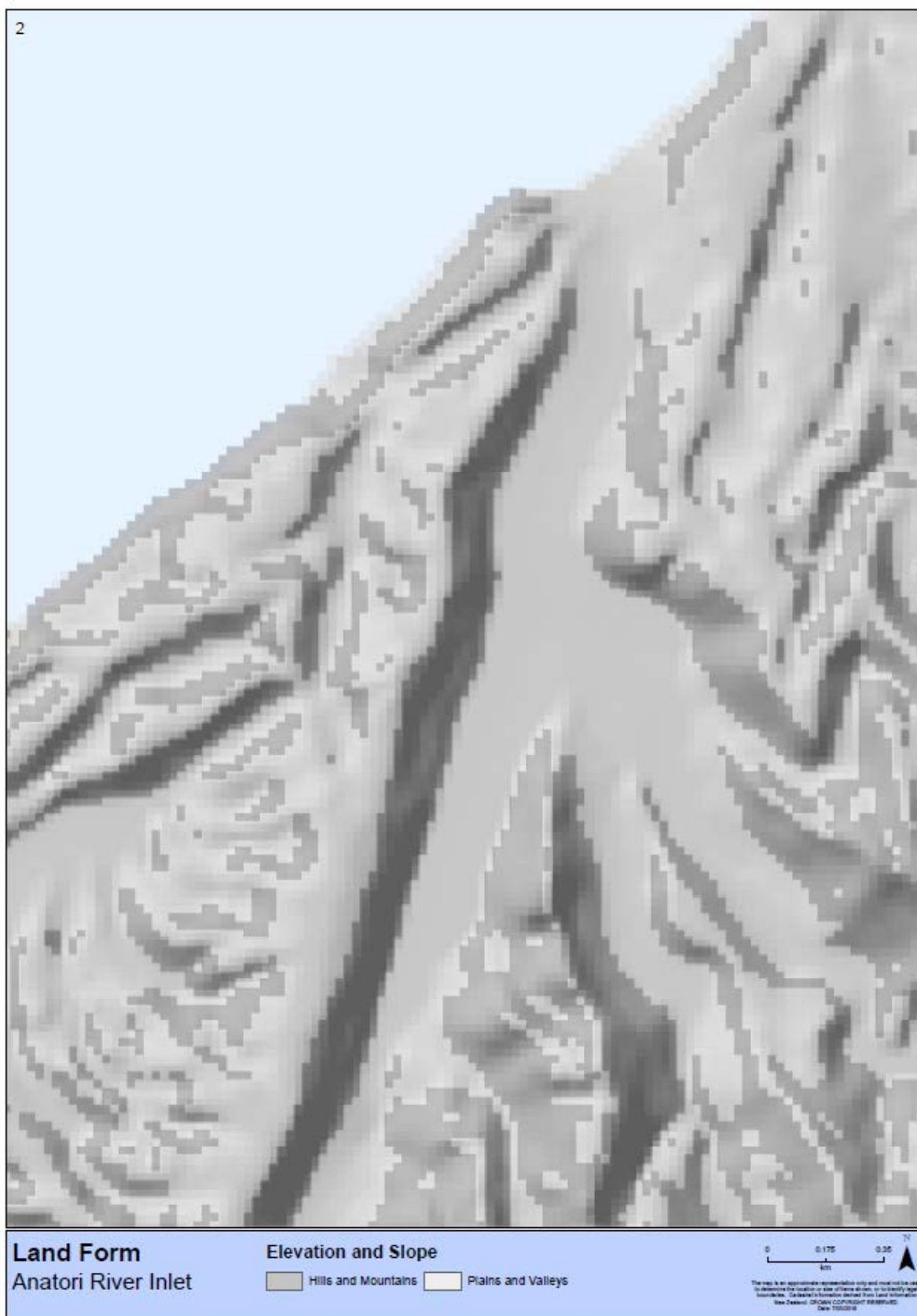
Location Group: Rivers and Estuaries

Landform	Low Elevation	Yes
	High Elevation	-
Landcover	Coastal Land and Open Sea	-
	Rivers, Estuaries and Riparian Land	Yes
	Low Vegetation and Landcover	Yes
	High Vegetation	Yes
	Urban Cover	-

Associative Characteristics	<p><u>Existing Features</u></p> <ul style="list-style-type: none"> - The location itself is a notable natural feature. - The location has no notable man-made features. - There are iwi associations recognised in the deeds of settlement. - There are known iwi associations with this location.
	<p><u>Existing Activities</u></p> <ul style="list-style-type: none"> - The location's primary land use activity is conservation. - The location's surrounding land use activity farming.

Anatori River

Map 1 – Landform



Anatori River

Map 2 – Landcover



Ruataniwha Inlet

Location Group: Rivers and Estuaries

Landform	Low Elevation	Yes
	High Elevation	-
Landcover	Coastal Land and Open Sea	-
	Rivers, Estuaries and Riparian Land	Yes
	Low Vegetation and Landcover	Yes
	High Vegetation	-
	Urban Cover	Yes

Associative Characteristics	<p><u>Existing Features</u></p> <ul style="list-style-type: none"> - The location itself is a notable natural feature. - The location has notable man-made modifications in the form of the Collingwood settlement. - There are iwi associations recognised in the deeds of settlement. - There are known iwi associations with this location.
	<p><u>Existing Activities</u></p> <ul style="list-style-type: none"> - The location's primary land use activities are farming and living. - The location's surrounding land use activity conservation.

Ruataniwha Inlet

Map 2 – Landcover



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Land Cover Ruataniwha Inlet and Collingwood	LCDB 4.1 2012 Land Cover Classes Low Vegetation and Landcover High Vegetation	Plantation Harvested Forestry Shrublands and Scrub Presence of Water	Riparian and Coastal Vegetation Urban Cover Not Applicable	0 0.375 0.75 km N <small>The map is an approximate representation only and should not be used to determine the location or size of items shown, or to identify legal boundaries. No liability is accepted for any loss or damage arising from the use of this information. See Website: CROWN COPYRIGHT RESERVED. Date: 10/02/16</small>
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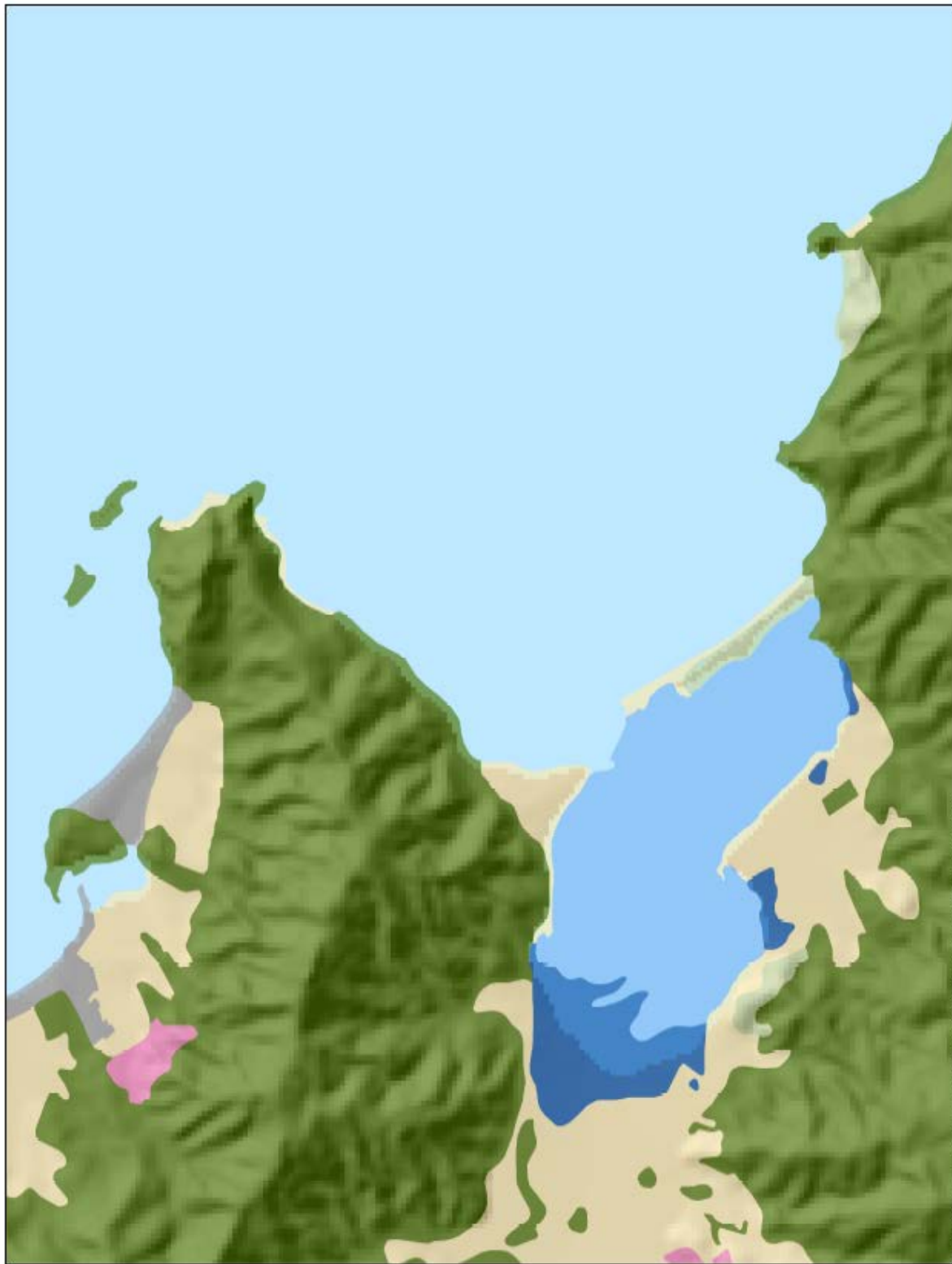
Wainui Bay Inlet

Location Group: Rivers and Estuaries

Landform	Low Elevation	Yes
	High Elevation	Yes
Landcover	Coastal Land and Open Sea	-
	Rivers, Estuaries and Riparian Land	Yes
	Low Vegetation and Landcover	Yes
	High Vegetation	Yes
	Urban Cover	-

Associative Characteristics	<p><u>Existing Features</u></p> <ul style="list-style-type: none"> - The location itself is a notable natural feature. - The location has some notable man-made modifications. - There are iwi associations recognised in the deeds of settlement. - There are known iwi associations with this location.
	<p><u>Existing Activities</u></p> <ul style="list-style-type: none"> - The location's primary land use activities are farming and living. - The location's surrounding land use activity conservation.

Wainui Bay Inlet
Map 2 – Landcover

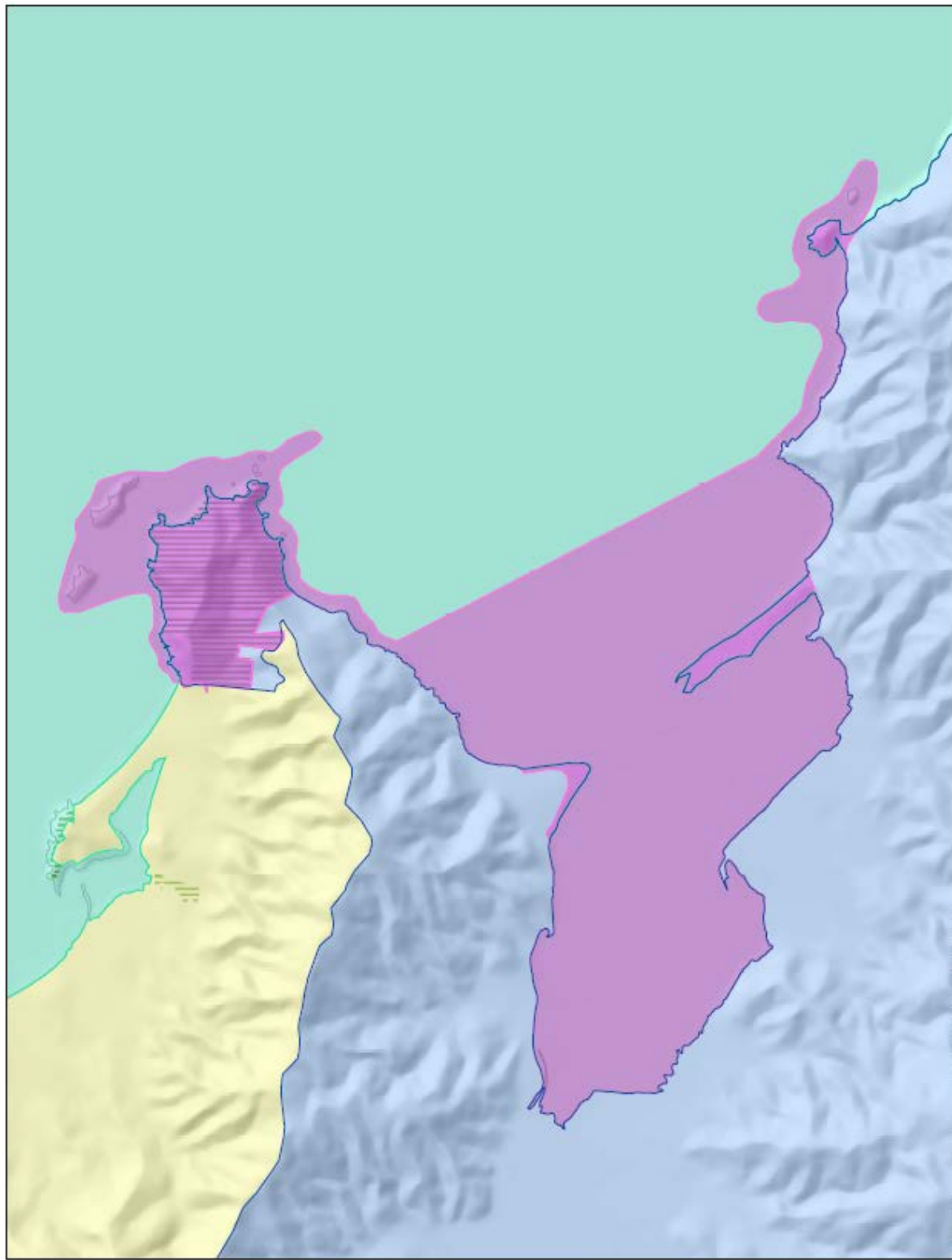


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Land Cover		LCDB 4.1 2012 Land Cover Classes		<table border="0"> <tr> <td></td> <td>Plantation Harvested Forestry</td> <td></td> <td>Riparian and Coastal Vegetation</td> </tr> <tr> <td></td> <td>Shrublands and Scrub</td> <td></td> <td>Urban Cover</td> </tr> <tr> <td></td> <td>Presence of Water</td> <td></td> <td>Not Applicable</td> </tr> </table>			Plantation Harvested Forestry		Riparian and Coastal Vegetation		Shrublands and Scrub		Urban Cover		Presence of Water		Not Applicable		
	Plantation Harvested Forestry		Riparian and Coastal Vegetation																
	Shrublands and Scrub		Urban Cover																
	Presence of Water		Not Applicable																
Wainui Bay Inlet			Low Vegetation and Landcover		High Vegetation														
<small>The map is an approximate representation only and must not be used to determine the location or size of these areas, or to verify legal boundaries. Detailed information obtained from Land Information New Zealand. CHGIS COPYRIGHT RESERVED. Date: 10/02/13</small>																			

Wainui Bay Inlet

Map 3 – Small Group July 2015 Report ONFL Overlays



ONL and OFL Wainui Bay Inlet

ONL	ONL-Marine	DOC Estate	Roads
NOT ONL	ONF	QEII Covenants	ONL Unconfirmed

0 0.5 0.8 km

The map is an approximate representation only and must not be used to determine the location or size of these areas, or to verify legal boundaries. Detailed information derived from land information systems should be used. DATE: 10/02/15

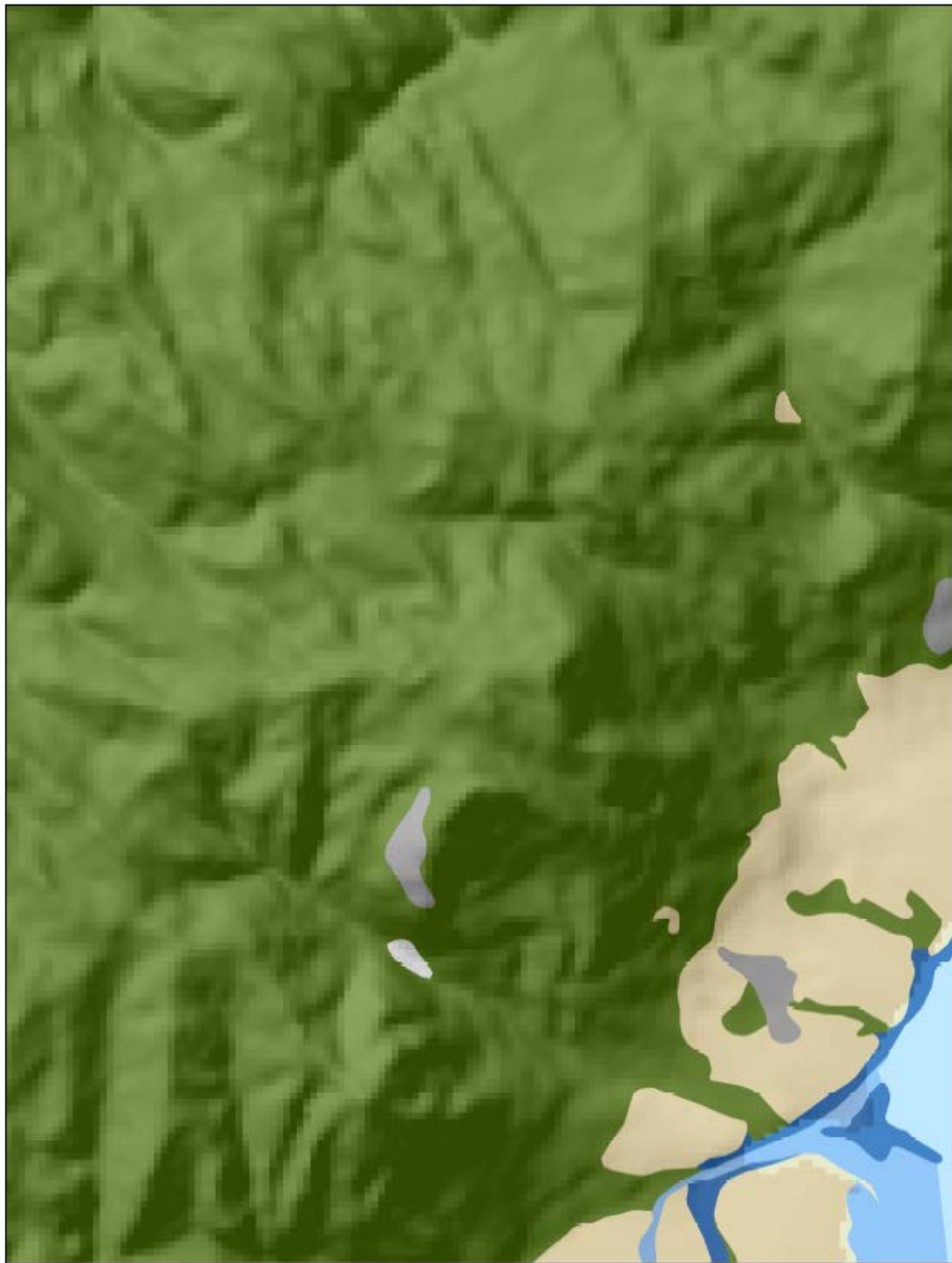
Mount Burnett

Location Group: Mountains

Landform	Low Elevation	-
	High Elevation	Yes
Landcover	Coastal Land and Open Sea	
	Rivers, Estuaries and Riparian Land	--
	Low Vegetation and Landcover	-
	High Vegetation	Yes
	Urban Cover	Yes

Associative Characteristics	<p><u>Existing Features</u></p> <ul style="list-style-type: none"> - The location itself is a notable natural feature. - The location does not have notable man-made modifications. - There are iwi associations recognised in the deeds of settlement. - There are known iwi associations with this location.
	<p><u>Existing Activities</u></p> <ul style="list-style-type: none"> - The location's primary land use activity is conservation. - The location's surrounding land use activities are industry and farming.

Mount Burnett
Map 2 – Landcover



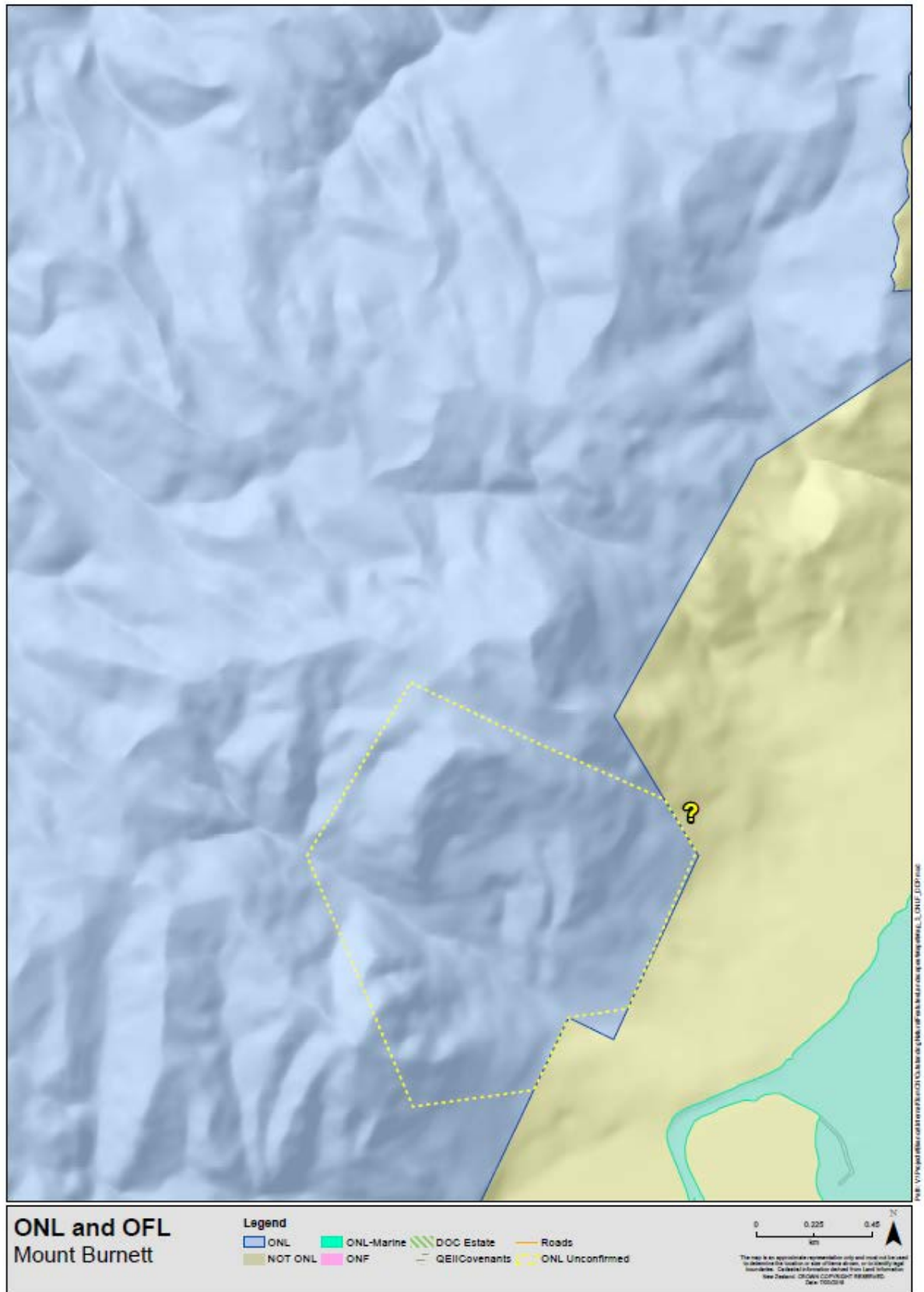
Document Path: V:\projects\GIS\environmental\GIS\CD\background\workspace\workspace\Map_2_Landcover_02P.mxd

<p>Land Cover Mount Burnett</p>	<p>LCDB 4.1 2012 Land Cover Classes</p>	<p>Plantation Harvested Forestry</p>	<p>Riparian and Coastal Vegetation</p>
	<p>Low Vegetation and Landcover</p>	<p>Shrublands and Scrub</p>	<p>Urban Cover</p>
<p>High Vegetation</p>	<p>Presence of Water</p>	<p>Not Applicable</p>	<p>0 0.225 0.45 km</p>

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Mount Burnett

Map 3 – Small Group July 2015 Report ONFL Overlays



Parapara Peak

Location Group: Mountains

Landform	Low Elevation	-
	High Elevation	Yes
Landcover	Coastal Land and Open Sea	-
	Rivers, Estuaries and Riparian Land	-
	Low Vegetation and Landcover	Yes
	High Vegetation	Yes
	Urban Cover	-

Associative Characteristics	<p><u>Existing Features</u></p> <ul style="list-style-type: none"> - The location itself is a notable natural feature. - The location has some notable man-made modifications. - There are iwi associations recognised in the deeds of settlement. - There are known iwi associations with this location.
	<p><u>Existing Activities</u></p> <ul style="list-style-type: none"> - The location's primary land use activity is conservation.

Parapara Peak



Map 1 – Landform

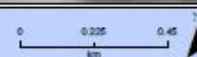


Document Path: V:\Projects\Haines\Haines\Work\GIS\Map\Map1\Map1_Landform_001.mxd

Land Form Parapara Peak

Elevation and Slope

-  Hills and Mountains
-  Plains and Valleys



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Parapara Peak
Map 2 – Landcover



Document Path: V:\Projects\Forest\Hemlock\GIS\Map\LCDB\LCDB\Map_2_Landcover_DDP.mxd

<p>Land Cover Parapara Peak</p>	<p>LCDB 4.1 2012 Land Cover Classes</p>	<p>Plantation Harvested Forestry</p>	<p>Alpine and Coastal Vegetation</p>
	<p>Low Vegetation and Landcover</p> <p>High Vegetation</p>	<p>Shrublands and Scrub</p> <p>Presence of Water</p>	<p>Urban Cover</p> <p>Not Applicable</p>

0 0.225 0.45 km

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Mount Evans

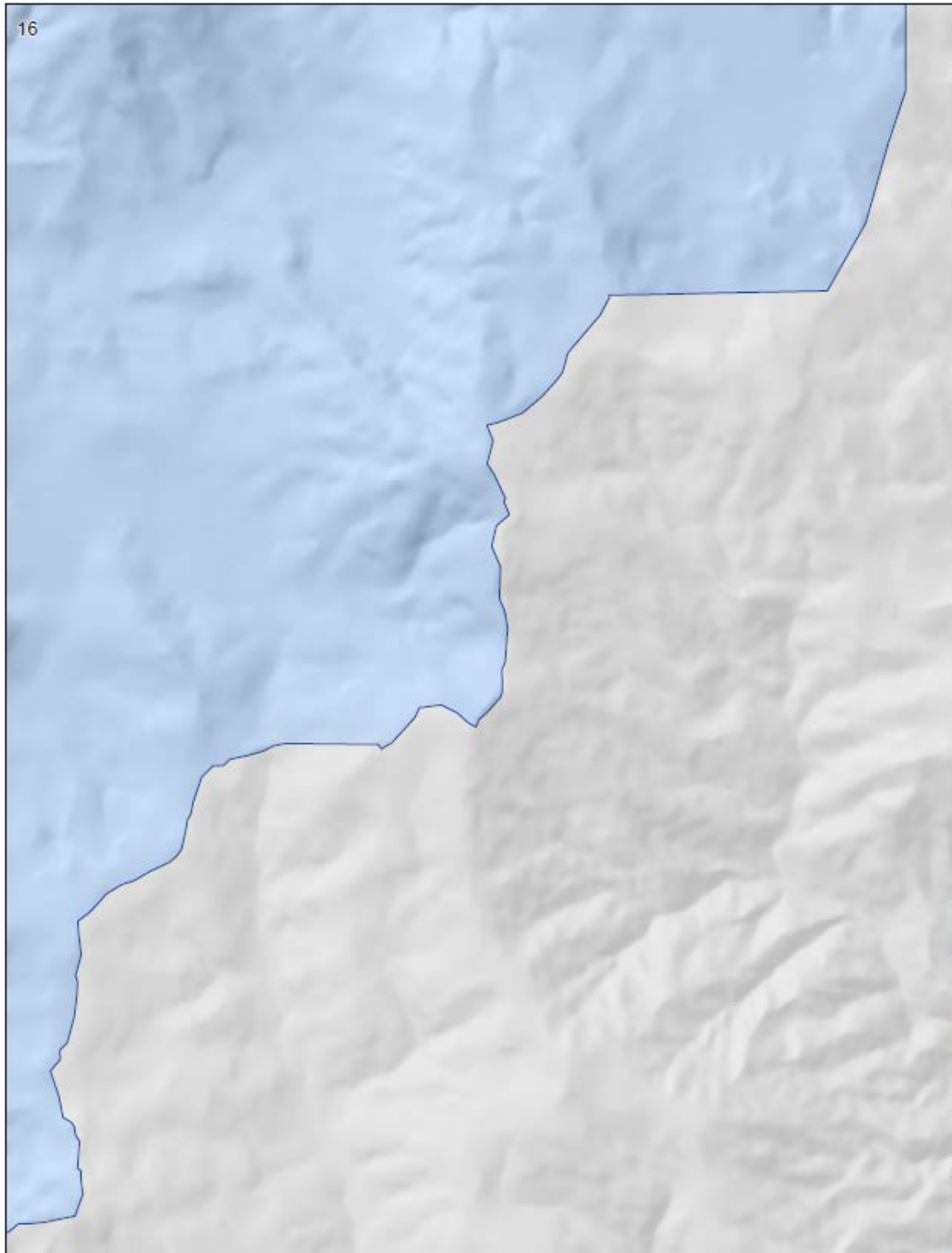
Location Group: Mountains

Landform	Low Elevation	-
	High Elevation	Yes
Landcover	Coastal Land and Open Sea	-
	Rivers, Estuaries and Riparian Land	-
	Low Vegetation and Landcover	Yes
	High Vegetation	Yes
	Urban Cover	-

Associative Characteristics	<p><u>Existing Features</u></p> <ul style="list-style-type: none"> - The location itself is a notable natural feature. - The location does not have notable man-made modifications. - There is no iwi association recognised in the deeds of settlement. - It is unknown if there is an iwi association with this location.
	<p><u>Existing Activities</u></p> <ul style="list-style-type: none"> - The location's primary land use activity is conservation.

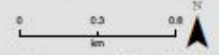
Mount Evans

Map 3 – Small Group July 2015 Report ONFL Overlays



ONL and OFL Mount Evans

- Legend**
- ONL
 - ONL-Marine
 - DOC Estate
 - Roads
 - NOT ONL
 - ONF
 - QEI/Covenants
 - ONL Unconfirmed



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Boulder Lake

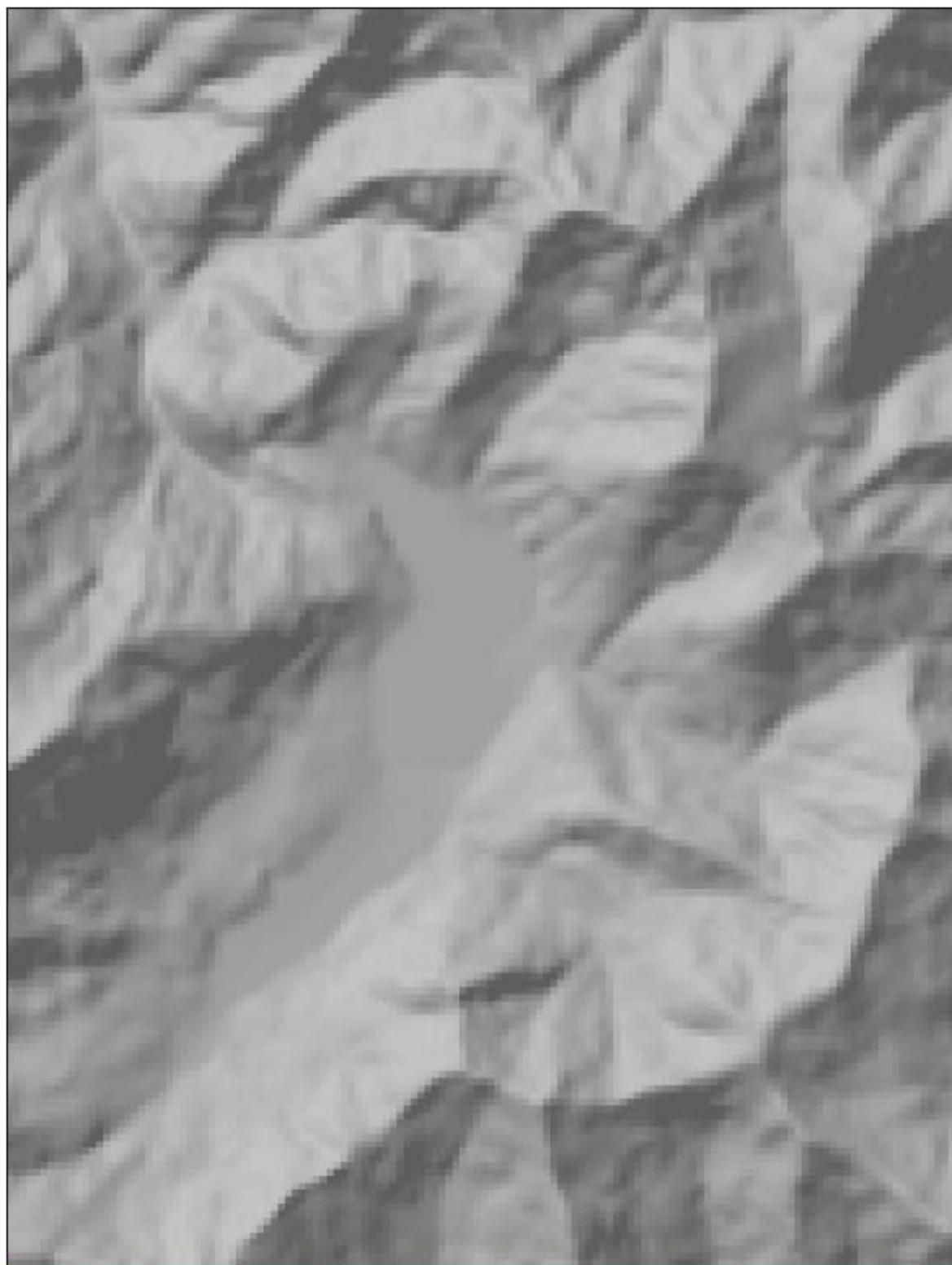
Location Group: Inland Lakes

Landform	Low Elevation	-
	High Elevation	Yes
Landcover	Coastal Land and Open Sea	-
	Rivers, Estuaries and Riparian Land	Yes
	Low Vegetation and Landcover	-
	High Vegetation	Yes
	Urban Cover	-

Associative Characteristics	<p><u>Existing Features</u></p> <ul style="list-style-type: none"> - The location itself is a notable natural feature. - The location does not have notable man-made modifications. - There are iwi associations recognised in the deeds of settlement. - There are known iwi associations with this location.
	<p><u>Existing Activities</u></p> <ul style="list-style-type: none"> - The location's primary land use activity is conservation.

Boulder Lake



Map 1 – Landform

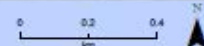


Document Path: V:\Project\Boulder Lake\GIS\Output\Map\Map_1_Landform_001.mxd

Land Form
Boulder Lake

Elevation and Slope

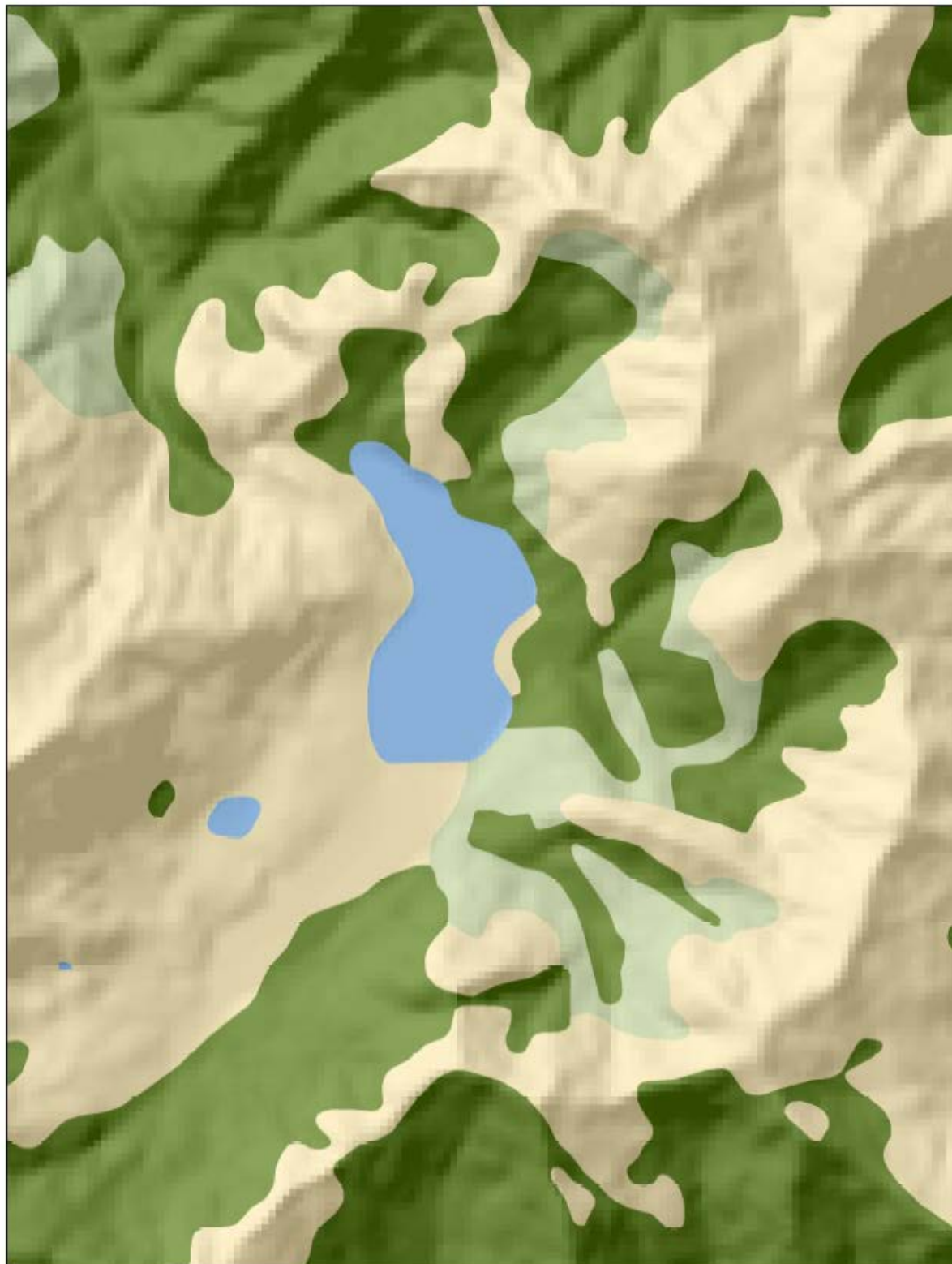
-  Hills and Mountains
-  Plains and Valleys



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Date: 10/02/19

Boulder Lake

Map 2 – Landcover



Document Path: V:\projects\BoulderLake\BoulderLake\GIS\Outputs\Map2\Map2_Landcover_DDP.mxd

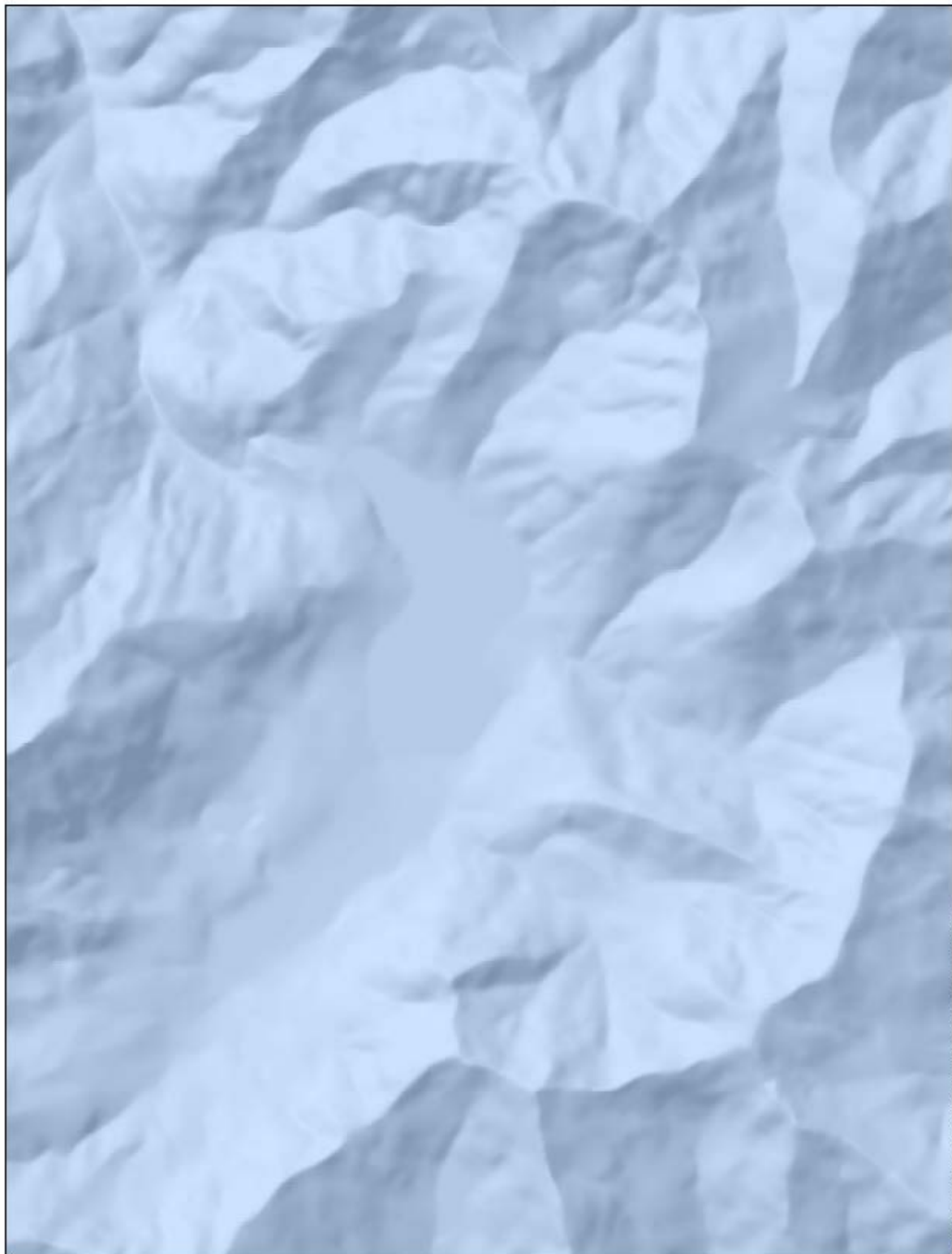
Land Cover Boulder Lake		LCDB 4.1 2012 Land Cover Classes	
	Low Vegetation and Landcover		Plantation Harvested Forestry
	High Vegetation		Shrublands and Scrub
	Presence of Water		Riparian and Coastal Vegetation
	Urban Cover		Not Applicable

0 0.2 0.4 km

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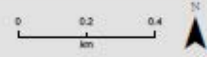
Boulder Lake

Map 3 – Small Group July 2015 Report ONFL Overlays



ONL and OFL Boulder Lake

- Legend**
- ONL
 - ONL-Marine
 - DOC Estate
 - Roads
 - NOT ONL
 - ONF
 - QEII Covenants
 - ONL Unconfirmed



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FILE: \\192.168.1.100\public\reports\2015\20150715\20150715_Small_Group_Report_ONFL_Overlays_3_ONL_OFL.mxd

Lake Stanley

Location Group: Inland Lakes

Landform	Low Elevation	-
	High Elevation	Yes
Landcover	Coastal Land and Open Sea	-
	Rivers, Estuaries and Riparian Land	Yes
	Low Vegetation and Landcover	Yes
	High Vegetation	Yes
	Urban Cover	-

Associative Characteristics	<p><u>Existing Features</u></p> <ul style="list-style-type: none"> - The location itself is a notable natural feature. - The location does not have notable man-made modifications. - There are iwi associations recognised in the deeds of settlement. - There are known iwi associations with this location.
	<p><u>Existing Activities</u></p> <ul style="list-style-type: none"> - The location's primary land use activity is conservation.

Lake Stanley

Map 2 – Landcover



Document Path: V:\Projects\GIS\Internal\GIS\40\LakeStanley\Map2\LakeStanley_Landcover_Map2_Landcover_GDP.mxd

Land Cover Lake Stanley	LCDB 4.1 2012 Land Cover Classes		
	Low Vegetation and Landcover	Plantation Harvested Forestry	Riparian and Coastal Vegetation
High Vegetation	Shrublands and Scrub	Urban Cover	Not Applicable
	Presence of Water		

0 0.3 0.6
km

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Collingwood

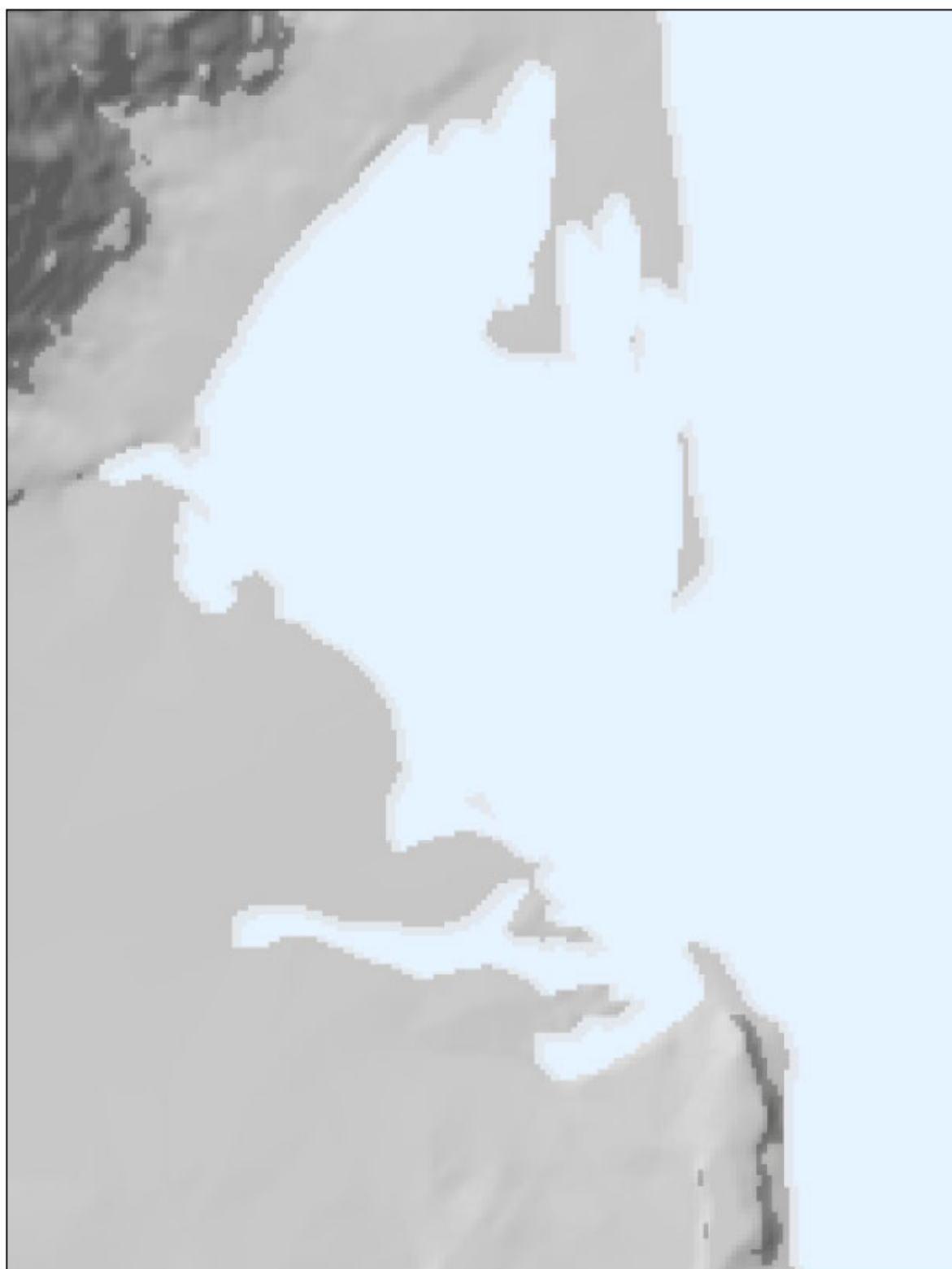
Location Group: Coastal Locations

Landform	Low Elevation	Yes
	High Elevation	-
Landcover	Coastal Land and Open Sea	Yes
	Rivers, Estuaries and Riparian Land	Yes
	Low Vegetation and Landcover	Yes
	High Vegetation	-
	Urban Cover	Yes

Associative Characteristics	<p><u>Existing Features</u></p> <ul style="list-style-type: none"> - The location has a notable natural feature in the form of Ruataniwha Inlet. - The location itself is a notable ma-made modification. - There are iwi associations recognised in the deeds of settlement. - There are known iwi associations with this location.
	<p><u>Existing Activities</u></p> <ul style="list-style-type: none"> - The location's primary land use activities are farming and living. - The location's surrounding land use activity conservation.

Collingwood

Map 1 – Landform



Document Path: \\Project\Users\Yvonne\Documents\Collingwood\Collingwood_Landform_DDP.mxd

Land Form Ruataniwha Inlet and Collingwood	Elevation and Slope Hills and Mountains Plains and Valleys	0 0.5 1.0 km N <small>The map is an approximate representation only and must not be used to determine the location or size of these objects, or to identify any boundaries. Geobase information derived from Land Information New Zealand. © Crown Copyright 2018/2019. Date: 10/02/18</small>
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Collingwood

Map 2 – Landcover



Document Path: V:\Projects\GIS\GIS\Collingwood\Map2\Collingwood_Landcover_Map2_Landcover_GDP.mxd

Land Cover Ruataniwha Inlet and Collingwood	LCDB 4.1 2012 Land Cover Classes Low Vegetation and Landcover High Vegetation	Plantation Harvested Forestry Shrublands and Scrub Presence of Water	Riparian and Coastal Vegetation Urban Cover Not Applicable	0 0.275 0.55 km N
	<small>The map is an approximate representation only and should not be used to determine the location or size of items shown, or to identify legal boundaries. No liability is accepted for errors or omissions. New Zealand CROWN COPYRIGHT RESERVED. Date: 10/02/16</small>			

Tarakohe Cliffs

Location Group: Coastal Locations

Landform	Low Elevation	Yes
	High Elevation	Yes
Landcover	Coastal Land and Open Sea	Yes
	Rivers, Estuaries and Riparian Land	-
	Low Vegetation and Landcover	Yes
	High Vegetation	-
	Urban Cover	Yes

Associative Characteristics	<p><u>Existing Features</u></p> <ul style="list-style-type: none"> - The location itself is a notable natural feature. - The location has notable man-made modifications in the form of Port Tarakohe. - There are iwi associations recognised in the deeds of settlement. - There are known iwi associations with this location.
	<p><u>Existing Activities</u></p> <ul style="list-style-type: none"> - The location's primary land use activity is industrial. - The location's surrounding land use activities are farming and living.

Tarakohe Cliffs

Map 2 – Landcover



Document Path: V:\Projects\Landcover\Tarakohe\Tarakohe\Map\Map_2_Landcover_GDF.mxd

Land Cover Tarakohe Cliffs ONF	LCDB 4.1 2012 Land Cover Classes Low Vegetation and Landcover High Vegetation	Plantation Harvested Forestry Shrublands and Scrub Presence of Water	Riparian and Coastal Vegetation Urban Cover Not Applicable	
	<small>The map is an approximate representation only and should be used to determine the location or size of items shown, or to identify legal boundaries. Detailed information should come from Land Information New Zealand. © Crown Copyright Reserved. Date: 10/03/16</small>			

Farewell Spit

Location Group: Identified ONFs

Landform	Low Elevation	Yes
	High Elevation	-
Landcover	Coastal Land and Open Sea	Yes
	Rivers, Estuaries and Riparian Land	-
	Low Vegetation and Landcover	Yes
	High Vegetation	Yes
	Urban Cover	-

Associative Characteristics	<p><u>Existing Features</u></p> <ul style="list-style-type: none"> - The location itself is a notable natural feature. - The location has notable man-made modifications in the form of the Puponga settlement. - There are iwi associations recognised in the deeds of settlement. - There are known iwi associations with this location.
	<p><u>Existing Activities</u></p> <ul style="list-style-type: none"> - The location's primary land use activity is conservation. - The location's surrounding land use activities are farming and living.



Farewell Spit

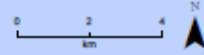
Map 1 – Landform



Land Form
Farewell Spit

Elevation and Slope

-  Hills and Mountains
-  Plains and Valleys



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Document Path: \\projects\h\h\h\Farewell Spit\GIS\Map1 - Landform_001.mxd

Farewell Spit

Map 2 – Landcover

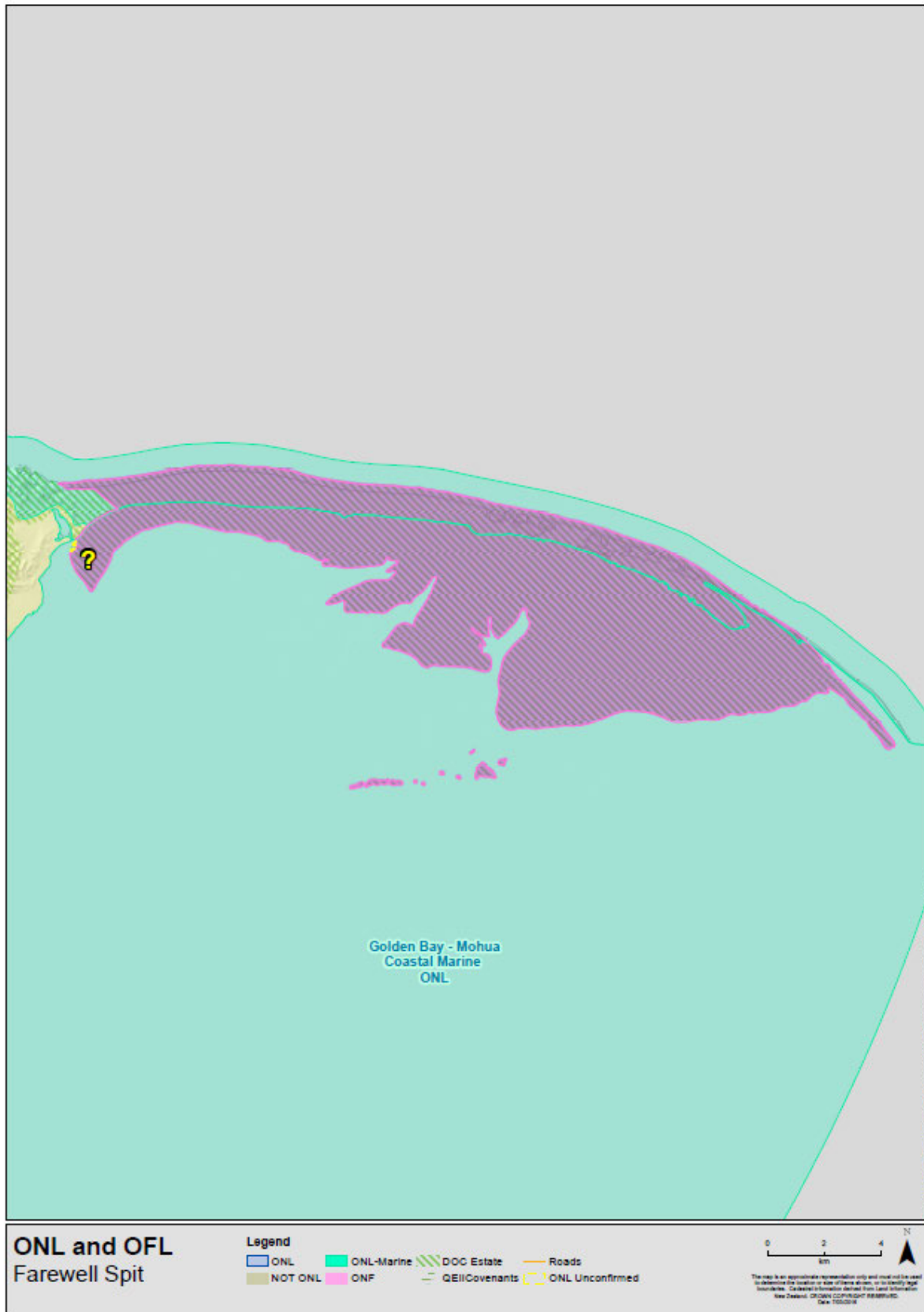


Document Path: V:\Projects\Borealis\Borealis\GIS\Outputs\Map2\FarewellSpit_Landcover_Map_2_Landcover_DOP.mxd

<h3>Land Cover</h3> <h3>Farewell Spit</h3>	LCD 4.1 2012 Land Cover Classes Low Vegetation and Landcover High Vegetation	 Plantation Harvested Forestry Shrublands and Scrub Presence of Water	 Riparian and Coastal Vegetation Urban Cover Not Applicable	<div style="text-align: right;">   </div> <p style="font-size: 8px;">This map is an approximate representation only and should not be used to determine the location or size of these areas, or to identify legal boundaries. Additional information derived from land information see website: www.cip.govt.nz REPRODUCED Date: 10/2013</p>
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Farewell Spit

Map 3 – Small Group July 2015 Report ONFL Overlays



Aorere River Gorge and Tributaries

Location Group: Identified ONFs

Landform	Low Elevation	Yes
	High Elevation	Yes
Landcover	Coastal Land and Open Sea	-
	Rivers, Estuaries and Riparian Land	Yes
	Low Vegetation and Landcover	Yes
	High Vegetation	Yes
	Urban Cover	-

Associative Characteristics	<p><u>Existing Features</u></p> <ul style="list-style-type: none"> - The location itself is a notable natural feature. - The location has notable man-made modifications in the form of a nearby bridge. - There are iwi associations recognised in the deeds of settlement. - There are known iwi associations with this location.
	<p><u>Existing Activities</u></p> <ul style="list-style-type: none"> - The location's primary land use activities are farming and living. - The location's surrounding land use activity is conservation.

Te Waikoropupu Springs

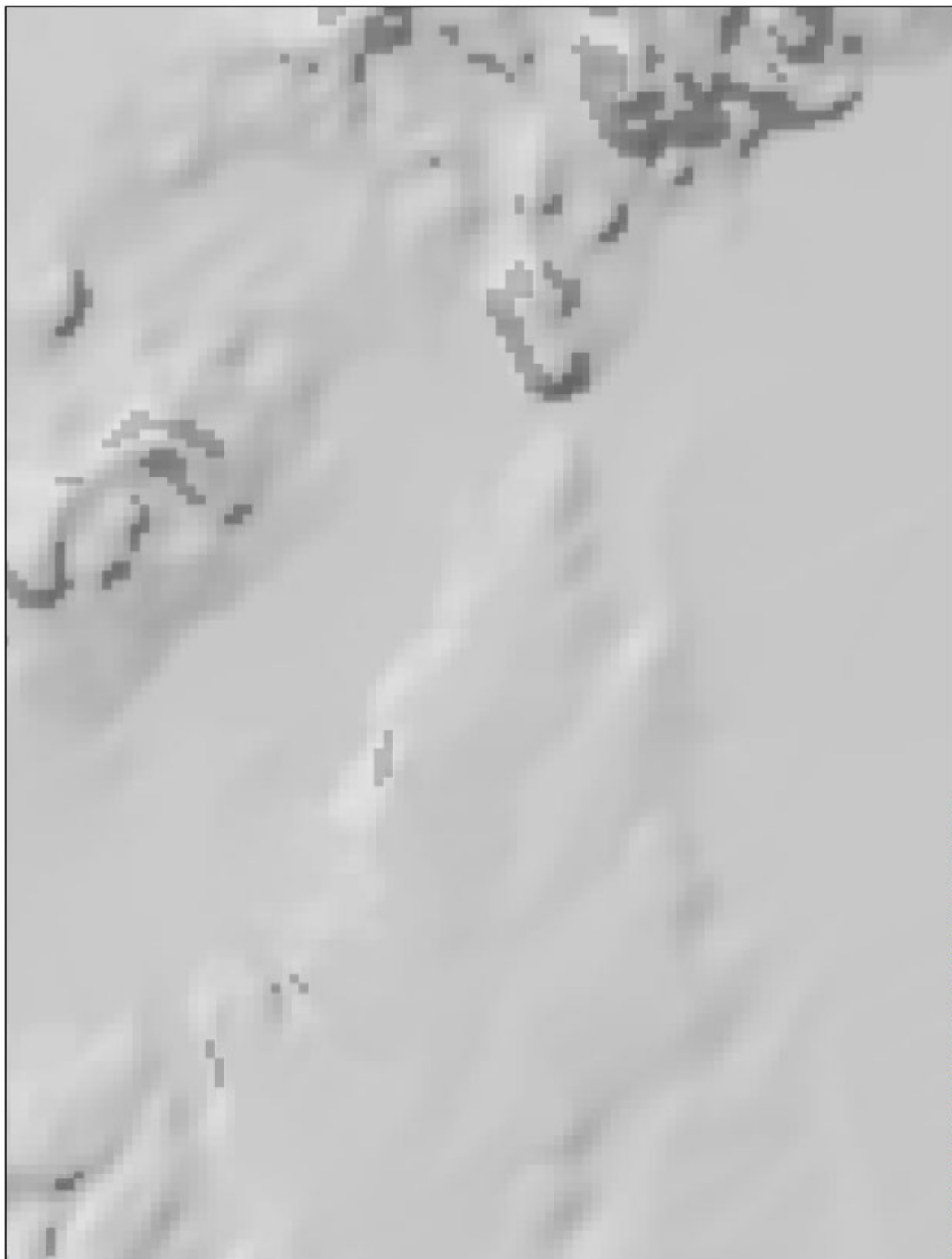
Location Group: Identified ONFs

Landform	Low Elevation	Yes
	High Elevation	-
Landcover	Coastal Land and Open Sea	-
	Rivers, Estuaries and Riparian Land	Yes
	Low Vegetation and Landcover	-
	High Vegetation	Yes
	Urban Cover	-



Associative Characteristics	<p><u>Existing Features</u></p> <ul style="list-style-type: none"> - The location itself is a notable natural feature. - The location has notable man-made modifications in the form of boardwalks, fencing and artwork. - There are iwi associations recognised in the deeds of settlement. - There are known iwi associations with this location.
	<p><u>Existing Activities</u></p> <ul style="list-style-type: none"> - The location's primary land use activity is conservation. - The location's surrounding land use activities are farming.

Te Waikoropupu Springs

Map 1 – Landform



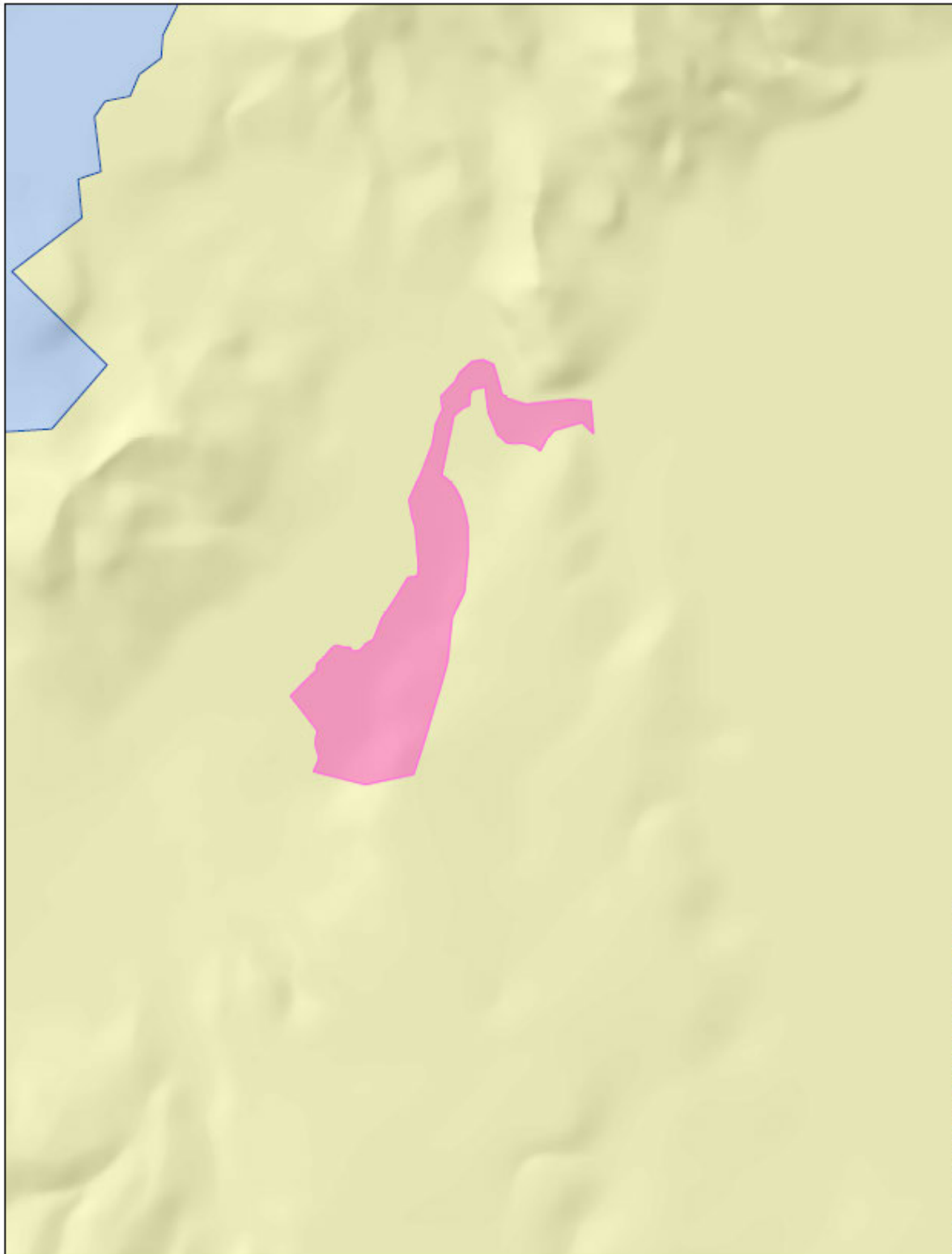
Document Path: \\Project\Waiora\Internal\GIS\Output\Map\TeWaikoropupuSprings\Map_1_Landform_DOF.mxd

Land Form Te Waikoropupu Springs ONF	Elevation and Slope		0 0.15 0.3 km	N
	 Hills and Mountains	 Plains and Valleys		

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Te Waikoropupu Springs

Map 3 – Small Group July 2015 Report ONFL Overlays



<p>ONL and OFL Te Waikoropupu Springs ONF</p>	Legend				<p>0 0.15 0.3 KIOM</p> <p>N</p> <p><small>The map is an approximate representation only and should be used to determine the location or size of items shown, or to identify legal boundaries. Detailed information should be used to determine New Zealand's OWN COPYRIGHT AIRBORNE DATA 1992/2014</small></p>
	<p>ONL</p> <p>NOT ONL</p>	<p>ONL-Marine</p> <p>ONF</p>	<p>DOC Estate</p> <p>QEII Covenants</p>	<p>Roads</p> <p>ONL Unconfirmed</p>	

FILE: \\192.168.1.100\public\reports\2015\20150723\small_group_report\onfl_overlays\onfl_overlays_3_ONL_OFL.mxd

Paynes Ford

Location Group: Identified ONFs

Landform	Low Elevation	Yes
	High Elevation	-
Landcover	Coastal Land and Open Sea	-
	Rivers, Estuaries and Riparian Land	Yes
	Low Vegetation and Landcover	Yes
	High Vegetation	Yes
	Urban Cover	-

Associative Characteristics	<p><u>Existing Features</u></p> <ul style="list-style-type: none"> - The location itself is a notable natural feature. - The location does not have notable man-made modifications. - There is no iwi association recognised in the deed of settlement. - It is unknown if there is an iwi association with this location.
	<p><u>Existing Activities</u></p> <ul style="list-style-type: none"> - The location's primary land use activity is conservation. - The location's surrounding land use activities are farming and living.

Paynes Ford
Map 2 – Landcover



Document Path: V:\Project\GIS\Landcover\PaynesFord\Map2\Map2_Landcover_COP.mxd

Land Cover		LCDB 4.1 2012 Land Cover Classes		<table border="0"> <tr> <td></td> <td>Plantation Harvested Forestry</td> <td></td> <td>Riparian and Coastal Vegetation</td> </tr> <tr> <td></td> <td>Shrublands and Scrub</td> <td></td> <td>Urban Cover</td> </tr> <tr> <td></td> <td>Presence of Water</td> <td></td> <td>Not Applicable</td> </tr> </table>			Plantation Harvested Forestry		Riparian and Coastal Vegetation		Shrublands and Scrub		Urban Cover		Presence of Water		Not Applicable	<p>0 0.125 0.25 km</p> <p>The map is an approximate representation only and should be used to determine the location or size of items shown, or to identify legal boundaries. Detailed information should be obtained from the original data. © Crown Copyright. All Rights Reserved. Date: 10/03/16</p>	
	Plantation Harvested Forestry		Riparian and Coastal Vegetation																
	Shrublands and Scrub		Urban Cover																
	Presence of Water		Not Applicable																
Paynes Ford ONF			Low Vegetation and Landcover		High Vegetation														

Paynes Ford

Map 3 – Small Group July 2015 Report ONFL Overlays



FILE: \\192.168.1.100\public\reports\2015\20150723\small_group_report\onfl_overlays\onfl_overlays_3_ONFL_D1P.mxd

ONL and OFL
Paynes Ford ONF

Legend	ONL	ONL-Marine	DOC Estate	Roads
NOT ONL	ONF	QEII Covenants	ONL Unconfirmed	

0 0.125 0.25
km

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The Grove

Location Group: Identified ONFs

Landform	Low Elevation	-
	High Elevation	Yes
Landcover	Coastal Land and Open Sea	-
	Rivers, Estuaries and Riparian Land	-
	Low Vegetation and Landcover	-
	High Vegetation	Yes
	Urban Cover	-

Associative Characteristics	<p><u>Existing Features</u></p> <ul style="list-style-type: none"> - The location itself is a notable natural feature. - The location does not have notable man-made features. - There is no iwi association recognised in the deed of settlement. - It is unknown if there is an iwi association with this location.
	<p><u>Existing Activities</u></p> <ul style="list-style-type: none"> - The location's primary land use activity is conservation. - The location's surrounding land use activities are farming and living.

The Grove

Map 2 – Landcover



Document Path: V:\Project6\enr\Internal\ForCDB\landcover\map2\landcover\Map_2_Landcover_DOF.mxd

Land Cover		LCDB 4.1 2012 Land Cover Classes		<table border="0"> <tr> <td></td> <td>Plantation Harvested Forestry</td> <td></td> <td>Riparian and Coastal Vegetation</td> </tr> <tr> <td></td> <td>Low Vegetation and Landcover</td> <td></td> <td>Urban Cover</td> </tr> <tr> <td></td> <td>High Vegetation</td> <td></td> <td>Not Applicable</td> </tr> <tr> <td></td> <td>Shrublands and Scrub</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Presence of Water</td> <td></td> <td></td> </tr> </table>			Plantation Harvested Forestry		Riparian and Coastal Vegetation		Low Vegetation and Landcover		Urban Cover		High Vegetation		Not Applicable		Shrublands and Scrub				Presence of Water			 	
	Plantation Harvested Forestry		Riparian and Coastal Vegetation																								
	Low Vegetation and Landcover		Urban Cover																								
	High Vegetation		Not Applicable																								
	Shrublands and Scrub																										
	Presence of Water																										
The Grove ONF		<small>The map is an approximate representation only and must not be used to determine the location or size of areas shown, or to identify legal boundaries. Colours information derived from Land Information New Zealand. ©CROWN COPYRIGHT RESERVED. Date: 10/02/19</small>																									

4.0 Part 3: TRMP Chapter and Section Review

4.1 Scope and Methodology for Part 3

Part 3 (“the Review”) assesses the adequacy of TRMP landscape provisions as possible risk mitigation measures for the risks identified in Part 1 and applied locationally in Part 2. This adequacy or inadequacy is assessed across the entire TRMP including the modification of water body form and landcover but excluding the direct use of water resources.

The Review is not specific to outstanding natural features and landscapes and the coastal environment, but does make provision for their assessment. General landscape protections are assessed as the question here is “do existing landscape-related provisions adequately protect landscapes characteristics from the adverse effects of risky activities?”

The Review assesses TRMP landscape provisions across four broad criteria:

- 1) National context
- 2) Measurement of the Landscape
- 3) Regulation of Risky Activities
- 4) Purpose of the Provision

1 National Context

National context assesses the consistency of TRMP provisions with relevant RMA and NZCPS provisions. These national provisions are:

Section 6(b) of the RMA 1991

“... the protection of outstanding natural features and landscapes from inappropriate subdivision, use and development...”

Objective 2 of the NZCPS

“To preserve the natural character of the coastal environment and protect natural features and landscape values...”

Policy 15 of the NZCPS

“To protect the natural features and natural landscapes (including seascapes) of the coastal environment from inappropriate subdivision, use, and development:

- avoid adverse effects of activities on outstanding natural features and outstanding natural landscapes in the coastal environment...”

The following questions address the national context:

Do the chapter's provisions;

- 1) **Directly address or are applicable to ONFLs?**
- 2) **Directly address or are applicable to coastal landscape?**

Answers include:

"Address," meaning that a provision directly concerns ONFLs or the coastal landscape.

"Applicable to," meaning that a provision does not refer to either ONFLs or the coastal landscape but can be applied to them indirectly.

"No," meaning is neither applicable to nor addresses directly.

2 Measurement and the Landscape

Measurement and regulation of the landscape assesses whether TRMP provisions actually measure landscape characteristics and regulate activities that affect those characteristics. This full procedure requires several steps to be taken:

- 1) Landscape characteristics are measured
- 2) ONFs and ONLs are identified and boundaries are drawn
- 3) Risky activities are identified
- 4) Risk activities are regulated or managed

The following questions address the measurement and regulation of the landscape:

Do the chapter's provisions;

- 1) **Measure landscape characteristics?**
- 2) **Identify ONFs and ONLs?**
- 3) **Identify risk activities?**

Answers include:

"Yes," does perform that task.

"Potentially," can perform that task but may not be required to.

"No," does not and cannot perform that task.

"Not Applicable," is not the purpose of the provision and is not assessed.

3 Management of Risky Activities

Regulation of risky activities assesses whether TRMP provisions actually regulate the risky activities identified in Part 1. These risky activities are subdivision, earthworks, land surface modifications, vegetation modification and coastal occupation.

The following questions address the management of risky activities:

Do the chapter's provisions regulate;

- a) **Subdivision?**
- b) **Earthworks?**
- c) **Land surface modifications?**
- d) **Vegetation modifications?**
- e) **Coastal occupation?**

Answers include:

“Yes,” does perform that task.

“Potentially,” can perform that task but may not be required to.

“No,” does not and cannot perform that task.

“Not Applicable,” is not the purpose of the provision and is not assessed.

4 Purpose of the Provision

The purpose of the provision assesses whether or not the provision should be in the chapter or section it is in, whether or not it functions properly, and what should be done about the provision.

The following questions address the management of risky activities:

Regarding the assessed provision;

- a) **Should it be in the chapter or section?**
 - i. Applicable to general landscapes? Or;
 - ii. Applicable to ONFLs? Or;
 - iii. Applicable to specific activities?
- b) **Can it apply?**
 - i. Applicable to general landscapes?
 - ii. Applicable to Golden Bay?
- c) **What should be done about the landscape reference or provision?**

Answers for questions a) and b) include:

“Yes.”

“No.”

Answers for question c) include:

“Retain” or “amend” if answer to a) is “Yes.”

“Remove” if answer to a) is “No.”

5 Overall Chapter and Section Assessment

An overall assessment is made chapter by chapter and section by section, in relation to its role in the overall chapter. The chapter or section is assessed as to its existing adequacy and

the scope of possible changes that can occur. Reference to existing provisions is necessary but not provided for in the assessment matrix used.

The following questions address the management of risky activities:

Regarding the existing policy chapters and sections;

- a) **Is landscape protection relevant and necessary?**
- b) **Is there fragmentation in the intra-chapter/section policy framework?**
- c) **Which risky activities are accounted for or managed and which aren't?**
- d) **Which landforms and landcovers are accounted for or managed and which aren't?**

Regarding the existing rules chapters and sections;

- 1) **Is landscape protection relevant and necessary?**
- 2) **Which risky activities are accounted for or managed and which aren't?**
- 3) **Which zones are accounted for or managed and which aren't?**

6 TRMP Review Overview

The results of the chapter and section overall assessments are aggregated within a table of landcovers and their respective risky activities. Each risky activity per landcover is checked for policy-level and rule-level support. This will highlight the adequate, inadequate and missing support within the TRMP.

Policy-level support describes where provisions from the Objectives and Policies Chapters support landscape protection. Rule-level support describes where provisions from the Rules Chapters support landscape protection.

The following questions assess the degree of support within the TRMP:

Regarding the landcovers, and subdivision and land use and development activities;

- 1) **Is there policy-level support?**
- 2) **Is there rule-level support?**

This aggregated assessment only signals whether or not support is present, and generally the degree or quality of that support. Suggested amendments will be found in the draft and proposed plan changes to come.

4.2 Chapter and Section Assessments

Chapter 5: Site Amenity Effects

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
5.1.3.1	Policy – Yes	Applicable to	Applicable to	Yes	No	Yes	Yes	Yes	Yes	Yes	Potentially	Yes	Yes	Amend
5.1.3.12	Policy – Yes	Applicable to	Addresses	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Amend

Chapter 5 Overview	
Is landscape protection relevant and necessary?	Landscape protection is relevant but not necessary.
Is there fragmentation in the intra-chapter/section policy framework?	There is some fragmentation. Issue 5.1.1.1 and objective 5.1.2 are both broad enough to cover landscape, but landscape references in policies 5.1.3.1 and 5.1.3.12 do not have corresponding methods for their regulation. Landscape values or characteristics are likely subsumed under the category of “amenity values” and “character.”
Which risky activities are accounted for or managed and which aren’t?	Nearly all activities can be managed.
Which landforms and landcovers are accounted for or managed and which aren’t?	All landforms and landcovers are accounted for and can be managed.

Section 6.2: Land Effects from Urban Growth

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
6.2.30	Explanation – No	No	No	Yes	No	Yes	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No	No	Remove

Section 6.2 Overview	
Is landscape protection relevant and necessary?	Landscape protection is neither relevant nor necessary.
Is there fragmentation in the intra-chapter/section policy framework?	There is significant fragmentation. There are no landscape-relevant issues, objectives, policies or methods for the landscape reference in the principal reasons and explanation to relate to.
Which risky activities are accounted for or managed and which aren't?	No activities are accounted for nor managed.
Which landforms and landcovers are accounted for or managed and which aren't?	No landforms and landcovers are accounted for and can be managed.

Section 6.3: Urban Infrastructure Services

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
6.3.3.11B	Policy – Yes	Applicable to	Applicable to	Yes	No	Yes	Potentially	Potentially	Potentially	Potentially	Potentially	No	Yes	Remove

Section 6.3 Overview	
Is landscape protection relevant and necessary?	Landscape protection is neither relevant nor necessary.
Is there fragmentation in the intra-chapter/section policy framework?	There is significant fragmentation. There are no landscape-relevant issues, objectives, or methods for policy 6.3.3.11 to relate to.
Which risky activities are accounted for or managed and which aren't?	All activities are accounted for but none are managed.
Which landforms and landcovers are accounted for or managed and which aren't?	Most landforms and landcovers are accounted for and can be managed. Coastal land and open sea may not be accounted for nor managed.

Section 6.4: Coastal Urban Development

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
6.4.3.4B	Policy – Yes	Applicable to	Addresses	No	No	Yes	Potentially	Potentially	Yes	Yes	Yes	Yes	Yes	Amend
6.4.3.4E	Policy – Yes	Address	Addresses	Potentially	No	Yes	Potentially	Potentially	Yes	Yes	Yes	Yes	Yes	Amend
6.4.3.4G	Policy – Yes	Applicable to	Addresses	Yes	No	Yes	Potentially	Potentially	Potentially	Potentially	Potentially	Yes	Yes	Amend
6.4.3.4H	Policy – Yes	Applicable to	Addresses	No	No	Yes	Potentially	Potentially	Yes	Yes	Yes	Yes	Yes	Retain

Section 6.4 Overview	
Is landscape protection relevant and necessary?	Landscape protection is relevant and necessary.
Is there fragmentation in the intra-chapter/section policy framework?	There is some fragmentation. There are no landscape-relevant issues, objectives or methods for policy 6.4.3.4 to relate to.
Which risky activities are accounted for or managed and which aren't?	All activities are accounted for and some are managed.
Which landforms and landcovers are accounted for or managed and which aren't?	Most landforms and landcovers are accounted for and can be managed. High elevation is less likely to be covered by this section.

Section 6.6: Land for Commercial Activities

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
6.6.30	Explanation – No	Applicable to	Applicable to	No	No	Yes	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No	No	Remove

Section 6.6 Overview	
Is landscape protection relevant and necessary?	Landscape protection is neither relevant nor necessary to this section.
Is there fragmentation in the intra-chapter/section policy framework?	There is significant fragmentation. There are no landscape-relevant provisions for the principal reasons and explanation to relate to.
Which risky activities are accounted for or managed and which aren't?	No activities are accounted for nor managed.
Which landforms and landcovers are accounted for or managed and which aren't?	No landforms and landcovers are accounted for nor can be managed.

Section 6.7: Settlement Character and Design

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
6.7.1	Issue – No	Applicable to	Applicable to	Yes	No	Yes	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Yes	Yes	Amend
6.7.2	Objective – Yes	Applicable to	Applicable to	Yes	No	Yes	Potentially	Potentially	Potentially	Potentially	Potentially	Yes	Yes	Amend
6.7.3.3	Policy – Yes	Applicable to	Applicable to	Yes	Potentially	Potentially	Potentially	Potentially	Potentially	Potentially	Potentially	Yes	Yes	Amend
6.7.20.1A	Method – No	Applicable to	Applicable to	Yes	No	Yes	Potentially	Potentially	Potentially	Potentially	Potentially	Yes	Yes	Amend
6.4.20.2B	Method – No	Applicable to	Applicable to	Yes	No	Yes	No	No	No	No	No	Yes	No	Amend
6.7.40.1	Monitoring – No	Applicable to	Applicable to	Yes	Not applicable	Not applicable	No	No	No	No	No	Yes	Yes	Amend

Section 6.7 Overview	
Is landscape protection relevant and necessary?	Landscape protection is relevant and necessary.
Is there fragmentation in the intra-chapter/section policy framework?	There is little fragmentation.
Which risky activities are accounted for or managed and which aren't?	Most activities are accounted for but none are managed.
Which landforms and landcovers are accounted for or managed and which aren't?	All landforms and landcovers are accounted for but cannot be managed.

Section 6.8: Richmond

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
6.8.30	Explanation – No	Applicable to	Applicable to	No	No	No	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No	No	Remove

Section 6.8 Overview	
Is landscape protection relevant and necessary?	Landscape protection is neither relevant nor necessary.
Is there fragmentation in the intra-chapter/section policy framework?	There is significant fragmentation. There are no landscape-relevant provisions for the principal reasons and explanation to relate to.
Which risky activities are accounted for or managed and which aren't?	No activities are accounted for nor managed.
Which landforms and landcovers are accounted for or managed and which aren't?	It is unknown which landforms and landcovers are accounted for or managed.

Section 6.11: Takaka-Eastern Golden Bay

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
6.11.1.4	Issues – No	Applicable to	Addresses	Yes	No	Yes	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Yes	No	Amend
6.11.1.5	Issues – No	Applicable to	Applicable to	Potentially	No	Yes	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Yes	No	Amend
6.11.1.8	Issues – No	Addresses	Applicable to	Yes	Potentially	Yes	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Yes	No	Amend
6.11.3.2A	Policies – Yes	Applicable to	Addresses	Yes	No	Yes	Potentially	Potentially	Yes	Potentially	Yes	Yes	No	Amend
6.11.3.2C	Policies – Yes	Applicable to	Addresses	Yes	No	Yes	Potentially	Potentially	Yes	Potentially	Yes	Yes	No	Amend
6.11.3.2D	Policies – Yes	Applicable to	Addresses	Yes	No	Yes	Potentially	Potentially	Yes	Potentially	Yes	Yes	No	Amend
6.11.3.2F	Policies – Yes	Applicable to	Addresses	Yes	No	Yes	Potentially	Potentially	Yes	Potentially	Yes	Yes	No	Amend
6.11.3.2G	Policies – Yes	Applicable to	Addresses	Yes	No	Yes	Potentially	Potentially	Yes	Potentially	Yes	Yes	No	Amend
6.11.3.6	Policies – Yes	Applicable to	Addresses	Yes	Potentially	Yes	Potentially	Potentially	Potentially	Yes	Yes	Yes	No	Amend
6.11.30	Explanation – No	Applicable to	Applicable to	Yes	No	Yes	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Yes	No	Amend

Section 6.11 Overview	
Is landscape protection relevant and necessary?	Landscape protection is relevant but not necessary.
Is there fragmentation in the intra-chapter/section policy framework?	There is little fragmentation.
Which risky activities are accounted for or managed and which aren't?	All activities are accounted for and some are managed.
Which landforms and landcovers are accounted for or managed and which aren't?	Most landforms and landcovers are accounted for and managed. High-lying land may not be accounted for nor managed.

Section 6.15: Mapua-Ruby Bay

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
6.15.3.2	Policy – Yes	No	Addresses	No	No	Yes	Potentially	Potentially	Yes	Potentially	Yes	Yes	No	Amend
6.15.30	Explanation – No	No	Addresses	No	No	No	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Yes	No	Amend

Section 6.15 Overview	
Is landscape protection relevant and necessary?	Landscape protection is relevant but not necessary.
Is there fragmentation in the intra-chapter/section policy framework?	There is significant fragmentation. There are no landscape-relevant issues, objectives or methods for Policy 6.15.3.2 or the principal reasons and explanation to relate to.
Which risky activities are accounted for or managed and which aren't?	All activities are accounted for and some are managed.
Which landforms and landcovers are accounted for or managed and which aren't?	It is unknown which landforms and landcovers are accounted for or managed.

Chapter 7: Rural Environment Effects

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
7.1.1.1C	Issue – No	Applicable to	Applicable to	Yes	No	Yes	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	No	Yes	Remove
7.1.30	Explanation – No	Applicable to	Applicable to	Yes	No	Yes	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	No	Yes	Remove
7.2.3.2C	Policy – Yes	Addresses	Applicable to	Potentially	Yes	Yes	Potentially	Potentially	Yes	Potentially	Potentially	No	Yes	Remove
7.2.3.4A	Policy – Yes	Applicable to	Applicable to	Yes	No	No	Yes	No	No	No	No	No	Yes	Remove
7.2.30	Explanation – No	Applicable to	Applicable to	Yes	No	Yes	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	No	Yes	Remove
7.2.40.2D	Monitoring – No	Applicable to	Applicable to	Yes	Not Applicable	Not Applicable	No	No	No	No	No	No	Yes	Remove
7.3.3.3	Policy – Yes	Applicable to	Addresses	Yes	No	Yes	Yes	Potentially	Yes	Potentially	Yes	Yes	Yes	Amend
7.3.3.6	Policy – Yes	Applicable to	Addresses	Yes	No	Yes	Potentially	Potentially	Potentially	Potentially	Yes	Yes	Yes	Amend
7.3.3.11	Policy – Yes	Applicable to	Addresses	No	No	Yes	Potentially	Potentially	Yes	Potentially	Yes	Yes	Yes	Amend
7.3.3.14	Policy – Yes	Applicable to	Addresses	Yes	No	Yes	Yes	Potentially	Yes	Potentially	Yes	Yes	Yes	Amend
7.3.3.16	Policy – Yes	Applicable to	Addresses	Yes	No	Yes	Yes	Potentially	Yes	Potentially	Yes	Yes	Yes	Amend
7.3.30	Explanation – No	Applicable to	Addresses	Yes	No	Yes	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Yes	Yes	Amend
7.4.20.1A	Method – No	Applicable to	Applicable to	Yes	No	Yes	Potentially	Potentially	Potentially	Potentially	Potentially	Yes	Yes	Retain
7.4.30	Explanation – No	Applicable to	Applicable to	No	No	No	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Yes	Yes	Retain
7.50.5	Environmental Results – No	Applicable to	Applicable to	Yes	No	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Yes	Yes	Amend

Chapter 7 Overview	
Is landscape protection relevant and necessary?	Landscape protection is relevant but not necessary.
Is there fragmentation in the intra-chapter/section policy framework?	There is some fragmentation. Section 7.3 has no landscape-relevant methods for its policies to relate to.
Which risky activities are accounted for or managed and which aren't?	All activities are accounted for and most are managed.
Which landforms and landcovers are accounted for or managed and which aren't?	Most landforms and landcovers are accounted for and managed. Coastal land and open sea may not be accounted or managed.

Chapter 8: Margins of Rivers, Lakes, Wetlands and the Coast

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
8.1.3.7	Policy – Yes	Addresses	Addresses	No	Yes	No	No	Potentially	Potentially	Potentially	Potentially	Yes	Yes	Retain
8.1.20.3	Method – No	Applicable to	Addresses	Yes	No	Yes	Potentially	Potentially	Potentially	Potentially	Potentially	Yes	Yes	Amend
8.2.1	Issue - No	Applicable to	Applicable to	Yes	No	Yes	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Yes	Yes	Amend
8.2.3.16	Policy - Yes	Applicable to	Applicable to	Yes	No	Yes	Potentially	Potentially	Potentially	Potentially	Potentially	Yes	Yes	Amend
8.2.20.2C.v	Method - No	Applicable to	Applicable to	Yes	No	Yes	Potentially	Potentially	Potentially	Potentially	Potentially	Yes	Yes	Amend
8.2.30	Explanation – No	Applicable to	Applicable to	No	No	Yes	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Yes	Yes	Amend

Chapter 8 Overview	
Is landscape protection relevant and necessary?	Landscape protection is relevant and necessary.
Is there fragmentation in the intra-chapter/section policy framework?	There is some fragmentation. There are no landscape-relevant environmental results anticipated for the Issue 8.2.1 and Policy 8.2.3.16 to relate to.
Which risky activities are accounted for or managed and which aren't?	All activities are accounted for but none are managed.
Which landforms and landcovers are accounted for or managed and which aren't?	Low-lying land and rivers, estuaries and riparian vegetation are accounted for. Surrounding landcovers may also be accounted for. High-lying land may not be accounted for.

Chapter 9: Landscape

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
9.1.1.1	Issue – No	Addresses	Applicable to	Potentially	Yes	Yes	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Yes	Yes	Retain
9.1.1.2	Issue – No	Applicable to	Applicable to	Potentially	No	Yes	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Yes	Yes	Amend
9.1.1.3	Issue – No	Applicable to	Applicable to	Potentially	No	Yes	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Yes	Yes	Amend
9.1.2	Objective – Yes	Addresses	Addresses	Potentially	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Retain
9.1.3.1	Policy – Yes	Applicable to	Applicable to	Potentially	No	Yes	Potentially	Yes	Potentially	Yes	Potentially	Yes	Yes	Retain
9.1.3.2	Policy – Yes	Applicable to	Applicable to	Potentially	No	Yes	Potentially	Potentially	Yes	Potentially	Potentially	Yes	No	Amend
9.1.3.3	Policy – Yes	Applicable to	Applicable to	Yes	No	Yes	No	Potentially	Yes	Potentially	Potentially	Yes	No	Amend
9.1.3.4	Policy – Yes	Addresses	Applicable to	Potentially	Yes	Yes	Yes	Potentially	Potentially	Potentially	Potentially	Yes	No	Amend
9.1.3.5	Policy – Yes	Applicable to	Applicable to	Yes	Potentially	Potentially	No	No	No	No	No	Yes	Yes	Retain
9.1.3.6	Policy – Yes	Applicable to	Applicable to	Yes	No	Yes	Potentially	Potentially	Potentially	Potentially	Potentially	Yes	No	Amend
9.1.3.7	Policy – Yes	Applicable to	Applicable to	Yes	Potentially	Yes	Potentially	Yes	Potentially	Yes	Potentially	Yes	No	Not Applicable Not Operative
9.1.3.8	Policy – Yes	Applicable to	No	Potentially	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Amend
9.1.3.9	Policy – Yes	Addresses	Addresses	Yes	Yes	Yes	Potentially	Potentially	Potentially	Potentially	Potentially	Yes	No	Amend
9.1.20.1	Methods – No	Applicable to	Applicable to	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Amend
9.1.20.2	Methods – No	Addresses	Applicable to	Yes	Yes	Yes	No	No	No	No	No	Yes	Yes	Amend
9.1.20.3	Methods – No	Applicable to	Applicable to	Potentially	Potentially	Yes	Potentially	Potentially	Potentially	Potentially	Potentially	Yes	Yes	Amend
9.1.20.4	Methods – No	Applicable to	Applicable to	No	Potentially	Potentially	Potentially	Potentially	Potentially	Potentially	Potentially	Yes	Yes	Retain
9.1.30.1	Explanation – No	Applicable to	Applicable to	No	No	Yes	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Yes	Yes	Amend

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
9.1.30.2	Explanation – No	Applicable to	Applicable to	No	No	Yes	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Yes	Yes	Amend
9.1.30.3	Explanation – No	Applicable to	Applicable to	No	No	Yes	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Yes	Yes	Amend
9.1.30.4	Explanation – No	Applicable to	Applicable to	No	No	Yes	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Yes	Yes	Amend
9.1.40.1	Monitoring – No	Applicable to	Applicable to	Yes	Not Applicable	Not Applicable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Amend
9.1.40.2	Monitoring – No	Applicable to	Applicable to	Yes	Not Applicable	Not Applicable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Retain
9.2.1.1	Issue – No	Applicable to	Applicable to	Yes	No	Yes	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No	Yes	Remove
9.2.1.2	Issue – No	Applicable to	Applicable to	Yes	No	Yes	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No	Yes	Remove
9.2.1.3	Issue – No	Applicable to	Applicable to	Yes	No	Yes	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Yes	Yes	Amend
9.2.2	Objective – Yes	Applicable to	Applicable to	Yes	No	Yes	Yes	Yes	Yes	Potentially	Potentially	Yes	Yes	Amend
9.2.3.1	Policy – Yes	Applicable to	Applicable to	Yes	No	Yes	Yes	Yes	Yes	Potentially	Potentially	Yes	Yes	Amend
9.2.3.3	Policy – Yes	Applicable to	Applicable to	Yes	No	Yes	Potentially	Potentially	Potentially	Potentially	Potentially	Yes	Yes	Amend
9.2.3.4	Policy – Yes	Applicable to	Applicable to	Yes	Potentially	Yes	Yes	Yes	Yes	Yes	Potentially	Yes	Yes	Amend
9.2.3.5	Policy – Yes	Applicable to	Applicable to	No	No	Yes	Potentially	Yes	Yes	Yes	Yes	Yes	Yes	Amend
9.2.3.6	Policy – Yes	Applicable to	Applicable to	Yes	No	Yes	Yes	Yes	Yes	Yes	Potentially	Yes	Yes	Amend
9.2.20.1	Method – No	Applicable to	Applicable to	Potentially	Potentially	Yes	Yes	Yes	Yes	Yes	Potentially	Yes	Yes	Amend
9.2.20.2	Method – No	Applicable to	Applicable to	Yes	No	Yes	No	No	No	No	No	Yes	Yes	Amend
9.2.30	Explanation – No	Applicable to	Applicable to	Yes	No	Yes	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Yes	Yes	Amend
9.2.40.1	Monitoring – No	Applicable to	Applicable to	Yes	Not Applicable	Not Applicable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Amend
9.2.40.2	Monitoring – No	Applicable to	Applicable to	Yes	Not Applicable	Not Applicable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Retain
9.50.1	Environmental Results – No	Addresses	Applicable to	Yes	Yes	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Yes	Yes	Amend

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
9.50.3	Environmental Results – No	Applicable to	Addresses	Yes	No	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Yes	Yes	Amend
9.50.4	Environmental Results – No	Applicable to	Applicable to	Yes	No	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Yes	Yes	Amend
9.50.5	Environmental Results – No	Applicable to	Applicable to	Yes	No	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Yes	Yes	Amend
9.50.6	Environmental Results – No	Applicable to	Applicable to	Yes	No	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No	Yes	Remove

Chapter 9 Overview	
Is landscape protection relevant and necessary?	Landscape protection is relevant and necessary.
Is there fragmentation in the intra-chapter/section policy framework?	There is little fragmentation.
Which risky activities are accounted for or managed and which aren't?	All activities are accounted for and managed.
Which landforms and landcovers are accounted for or managed and which aren't?	All landforms and landcovers are accounted for and managed.

Section 11.2: Effects on the Environment

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
11.2.2	Objective – Yes	Applicable to	Applicable to	Yes	No	Yes	Potentially	Potentially	Potentially	Potentially	Potentially	No	Yes	Remove
11.2.3.3E	Policy – Yes	Applicable to	Applicable to	Yes	No	Yes	Potentially	Yes	Yes	Potentially	Potentially	No	Yes	Remove

Section 11.2 Overview	
Is landscape protection relevant and necessary?	Landscape protection is neither relevant nor necessary.
Is there fragmentation in the intra-chapter/section policy framework?	There is some fragmentation. There are no landscape-relevant issues, methods, principal reasons and explanations or environmental results anticipated for Objective 11.2.2 and 11.2.3.3 to relate to.
Which risky activities are accounted for or managed and which aren't?	All activities are accounted for and some are managed.
Which landforms and landcovers are accounted for or managed and which aren't?	All landforms and landcovers are accounted for and can be managed.

Chapter 16: General Rules

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
16.3.7.3(3)	Rule – Yes Restricted D	Applicable to	Applicable to	Yes	No	Yes	Yes	Potentially	Potentially	Potentially	Potentially	Yes	Yes	Retain
16.3.7.3(7)	Rule – Yes Restricted D	Applicable to	Applicable to	Yes	No	Yes	Yes	No	No	No	No	Yes	Yes	Amend
16.3.8.1(10)	Rule – Yes Controlled	Applicable to	No	Yes	No	Yes	Yes	No	No	No	No	Yes	No	Amend
16.3.8.4(2)	Rule – Yes Restricted D	Applicable to	Addresses	Yes	No	Yes	Yes	Potentially	Potentially	Potentially	Potentially	Yes	No	Amend
16.3.8.4(5)	Rule – Yes Restricted D	Applicable to	Addresses	Yes	No	Yes	Yes	Potentially	Potentially	Potentially	Potentially	Yes	No	Amend
16.3.8.4(7)	Rule – Yes Restricted D	Applicable to	Addresses	Yes	No	No	Yes	No	No	No	No	Yes	No	Amend
16.3.20	Explanation – No	Applicable to	Applicable to	Yes	No	Yes	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Yes	Yes	Amend
16.5.1.3	Scope – No	Applicable to	Applicable to	Yes	No	No	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Yes	Yes	Amend
16.6.20	Reason – No	Applicable to	Applicable to	Yes	No	Yes	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Yes	Yes	Amend
16.6A(10)	Schedule – No	Applicable to	Applicable to	Yes	No	Yes	Potentially	Potentially	Potentially	Potentially	Potentially	Yes	Yes	Amend

Chapter 16 Overview

Is landscape protection relevant and necessary?	Landscape protection is relevant and necessary.
Which risky activities are accounted for or managed and which aren't?	All activities are loosely accounted for but only subdivision, and network utilities and public works are managed.
Which zones are accounted for or managed and which aren't?	Zones managed are Residential Zone, Rural 3 Zone, Rural Residential Zone and Closed Zones. Zones not managed are Business and Industrial Zone, Rural 1 Zone, and Rural 2 Zone.

Section 17.5: Rural 1 Zone Rules

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
17.5.5.5(1)	Rule – Yes Restricted D	Applicable to	Applicable to	Yes	No	Yes	No	Potentially	No	Yes	Potentially	Yes	Yes	Amend
17.5.20	Reason – No	Applicable to	Applicable to	Yes	No	Yes	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Yes	Yes	Amend

Section 17.5 Overview	
Is landscape protection relevant and necessary?	Landscape protection is both relevant and necessary.
Which risky activities are accounted for or managed and which aren't?	Some activities are accounted for but only vegetation modification is managed.
Which zones are accounted for or managed and which aren't?	Only Rural 1 Zone is managed.

Section 17.6: Rural 2 Zone Rules

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
17.6.3.4(21)	Rule – Yes Restricted D	Applicable to	Applicable to	Potentially	No	Yes	No	Potentially	Yes	Potentially	Potentially	Yes	Yes	Amend
17.6.5.5(1)	Rule – Yes Restricted D	Applicable to	Applicable to	Yes	No	Yes	No	Potentially	No	Yes	Potentially	Yes	Yes	Amend
17.6.20	Reason – No	Applicable to	Applicable to	Yes	No	Yes	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Yes	Yes	Amend

Section 17.6 Overview	
Is landscape protection relevant and necessary?	Landscape protection is both relevant and necessary.
Which risky activities are accounted for or managed and which aren't?	Some activities are accounted for and land surface modification and vegetation modification are managed.
Which zones are accounted for or managed and which aren't?	Only Rural 2 Zone is managed.

Section 17.7: Rural 3 Zone Rules

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
17.7.3.3(24)	Rule – Yes Restricted D	Applicable to	Addresses	Yes	No	Yes	No	Potentially	Yes	Potentially	Potentially	Yes	Yes	Amend
17.7.20	Reason – No	Applicable to	Addresses	Yes	No	Yes	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Yes	Yes	Amend

Section 17.7 Overview	
Is landscape protection relevant and necessary?	Landscape protection is both relevant and necessary.
Which risky activities are accounted for or managed and which aren't?	Some activities are accounted for and only land surface modification is managed.
Which zones are accounted for or managed and which aren't?	Only Rural 3 Zone is managed.

Section 17.8: Rural Residential Rules

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
17.8.3.2(1)	Rule – Yes Restricted D	Applicable to	Applicable to	Yes	No	Yes	No	Potentially	Yes	Potentially	Potentially	Yes	Yes	Amend
17.8.5.5	Rule – Yes Restricted D	Applicable to	Applicable to	Yes	No	Yes	No	Potentially	No	Yes	Potentially	Yes	Yes	Amend
17.8.20	Reason – No	Applicable to	Applicable to	Yes	No	Yes	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Yes	Yes	Amend

Section 17.8 Overview	
Is landscape protection relevant and necessary?	Landscape protection is both relevant and necessary.
Which risky activities are accounted for or managed and which aren't?	Some activities are accounted for and land surface modification and vegetation modification are managed.
Which zones, landforms and landcovers are accounted for or managed and which aren't?	Only Rural Residential Zone is managed.

Section 17.9: Open Space Zone Rules

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
17.9.20	Reason – No	Applicable to	Applicable to	Yes	No	No	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	No	Yes	Remove

Section 17.9 Overview	
Is landscape protection relevant and necessary?	Landscape protection is both relevant and necessary.
Which risky activities are accounted for or managed and which aren't?	No activities are accounted for or managed.
Which zones are accounted for or managed and which aren't?	Only Open Space Zone is managed.

Section 18.2: Landscape Priority Areas

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
18.2.2.1	Rule – Yes Permitted	No	No	No	No	Yes	No	Yes	Yes	Potentially	No	Yes	No	Amend
18.2.3.1	Rule – Yes Controlled	No	No	No	No	Yes	No	Yes	Yes	Yes	No	Yes	No	Amend
18.2.4.1	Rule – Yes Permitted	No	No	No	No	Yes	No	Potentially	No	Yes	No	Yes	No	Amend
18.2.4.2	Rule – Yes Restricted D	No	No	No	No	Yes	No	Potentially	No	Yes	No	Yes	No	Amend
18.2.5.1	Rule – Yes Controlled	No	No	No	No	Yes	No	Potentially	Potentially	Yes	No	Yes	No	Amend
18.2.5.2	Rule – Yes Restricted D	No	No	No	No	Yes	No	Potentially	Potentially	Yes	No	Yes	No	Amend
18.2.20	Explanation - No	No	No	No	No	Yes	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Yes	No	Amend

Section 18.2 Overview	
Is landscape protection relevant and necessary?	Landscape protection is both relevant and necessary.
Which risky activities are accounted for or managed and which aren't?	Some activities are accounted for and managed.
Which zones, landforms and landcovers are accounted for or managed and which aren't?	No zones, but only Landscape Priority Areas are managed. These are only two small areas in the Takaka hills and near St Arnaud.

Section 18.5: Land Disturbance Areas

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
18.5.20	Reason – No	Applicable to	Addresses	Yes	No	Yes	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	No	Yes	Remove

Section 18.5 Overview	
Is landscape protection relevant and necessary?	Landscape protection is neither relevant nor necessary.
Which risky activities are accounted for or managed and which aren't?	No activities are accounted for or managed.
Which zones are accounted for or managed and which aren't?	No zones are managed.

Section 18.6: Quarry Area

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
18.6.4.1(5)	Rule – Yes Restricted D	Applicable to	Applicable to	Yes	No	Yes	No	Yes	Yes	Yes	Potentially	Yes	Yes	Amend

Section 18.6 Overview	
Is landscape protection relevant and necessary?	Landscape protection is relevant but not necessary.
Which risky activities are accounted for or managed and which aren't?	Most activities are both accounted for and managed.
Which zones are accounted for or managed and which aren't?	No zones, but only quarry areas are managed.

Section 18.11: Coastal Environment Area

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
18.11.3.1(1)	Rule – Yes Controlled	Applicable to	Addresses	Yes	No	Yes	No	Potentially	Yes	Potentially	Yes	Yes	Yes	Amend
18.11.3.2(1)	Rule – Yes Restricted D	Applicable to	Addresses	Yes	No	Yes	No	Potentially	Yes	Potentially	Yes	Yes	Yes	Amend
18.11.20	Reason – No	Applicable to	Addresses	No	No	Yes	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Yes	Yes	Amend

Section 18.11 Overview	
Is landscape protection relevant and necessary?	Landscape protection is both relevant and necessary.
Which risky activities are accounted for or managed and which aren't?	Most activities are accounted for and some are managed.
Which zones are accounted for or managed and which aren't?	Whichever zones fall within the coastal environment area are managed.

Section 21.2: Protection of Habitats and Ecosystems

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
21.2.3.1E	Policy – Yes	Applicable to	Addresses	Yes	No	Yes	No	No	No	No	No	Yes	Yes	Amend
21.2.3.3E	Policy – Yes	Applicable to	Addresses	Yes	No	Yes	No	Potentially	Potentially	Potentially	Yes	Yes	Yes	Amend

Section 21.2 Overview	
Is landscape protection relevant and necessary?	Landscape protection is both relevant and necessary.
Is there fragmentation in the intra-chapter/section policy framework?	There is significant fragmentation. There are no issues, objectives, methods or principal reasons and explanation for Policies 21.2.3.1 and 21.2.3.3 to relate to.
Which risky activities are accounted for or managed and which aren't?	Most activities are accounted for and only coastal occupation is managed.
Which landforms and landcovers are accounted for or managed and which aren't?	All landforms and landcovers are accounted for and managed.

Section 21.3: Protection of Landscapes, Seascapes and Natural Features

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
21.3.1	Issue – No	Applicable to	Addresses	Yes	Potentially	Yes	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Yes	Yes	Retain
21.3.2	Objective – Yes	Applicable to	Addresses	Yes	Potentially	Potentially	Potentially	Potentially	Potentially	Potentially	Yes	Yes	Yes	Retain
21.3.3.1	Policy – Yes	Applicable to	Addresses	Yes	Potentially	Yes	Potentially	Potentially	Potentially	Potentially	Yes	Yes	Yes	Amend
21.3.20.1	Method - No	Applicable to	Addresses	No	No	Yes	Potentially	Potentially	Potentially	Potentially	Yes	Yes	Yes	Amend
21.3.20.2	Method – No	Applicable to	Addresses	Yes	Potentially	No	No	No	No	No	No	Yes	Yes	Retain
21.3.30	Explanation – No	Addresses	Addresses	Yes	No	Yes	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Yes	Yes	Retain
21.3.40.1	Monitoring – No	Applicable to	Applicable to	Yes	Not Applicable	Not Applicable	No	Yes	Yes	Potentially	Yes	Yes	Yes	Amend
21.50.1	Results – No	Applicable to	Applicable to	Yes	No	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Yes	Yes	Retain
21.50.3	Results – No	Applicable to	Addresses	Yes	No	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Yes	Yes	Amend
21.50.6	Results – No	Applicable to	Addresses	Yes	No	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Yes	Yes	Amend

Section 21.3 Overview	
Is landscape protection relevant and necessary?	Landscape protection is both relevant and necessary.
Is there fragmentation in the intra-chapter/section policy framework?	There is little fragmentation.
Which risky activities are accounted for or managed and which aren't?	Most activities are accounted for and only coastal occupation is managed.
Which landforms and landcovers are accounted for or managed and which aren't?	All landforms and coastal land and open sea are accounted for and managed. The other landcovers are accounted for but only managed if they are coastal.

Section 22.1: Protection of Values

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
22.1.1	Issue – No	Applicable to	Addresses	Yes	No	Yes	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Yes	Yes	Amend
22.1.2	Objective – Yes	Applicable to	Addresses	Yes	No	Yes	No	No	No	No	Yes	Yes	Yes	Amend
22.1.3.1	Policy – Yes	Applicable to	Addresses	Yes	No	Yes	No	No	No	No	Yes	Yes	Yes	Amend
22.1.30	Explanation – No	Applicable to	Addresses	Yes	No	Yes	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Yes	Yes	Amend

Section 22.1 Overview	
Is landscape protection relevant and necessary?	Landscape protection is both relevant and necessary.
Is there fragmentation in the intra-chapter/section policy framework?	There is significant fragmentation. Objective 22.1.2 and Policy 22.1.3.1 do not adequately support Issue 22.1.1, and there are no landscape-relevant methods or environmental results anticipated which relate to these provisions.
Which risky activities are accounted for or managed and which aren't?	Most activities are accounted for and only coastal occupation is managed.
Which landforms and landcovers are accounted for or managed and which aren't?	All landforms and landcovers are accounted for and managed.

Section 23.1: Natural Hazards

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
23.1.1.2(iii)	Issue – No	Applicable to	Addresses	Yes	No	Yes	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No	Yes	Remove

Section 23.1 Overview	
Is landscape protection relevant and necessary?	Landscape protection is neither relevant nor necessary.
Is there fragmentation in the intra-chapter/section policy framework?	There is significant fragmentation. There are no landscape-relevant objectives, policies, methods or environmental results anticipated for Issue 23.1.1.2 to relate to.
Which risky activities are accounted for or managed and which aren't?	No activities are accounted for or managed.
Which landforms and landcovers are accounted for or managed and which aren't?	No landforms and landcovers are accounted for and managed.

Chapter 25: Coastal Marine Area Rules

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
25.1.2.3(4)(l)	Rule – Yes Discretionary	Applicable to	Addresses	Yes	No	Yes	No	Potentially	Potentially	Potentially	Yes	Yes	Yes	Amend
Schedule 25D Area 17	Schedule – No	Applicable to	Addresses	Yes	No	No	Potentially	Potentially	Potentially	Potentially	Potentially	No	No	Remove

Chapter 25 Overview	
Is landscape protection relevant and necessary?	Landscape protection is both relevant and necessary.
Which risky activities are accounted for or managed and which aren't?	Some activities are accounted for and coastal occupation is managed.
Which zones are accounted for or managed and which aren't?	Coastal land and open sea and some of rivers, estuaries and riparian vegetation are managed.

Section 27.4: Impacts on Water Quality

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
27.4.1.3	Issue - No	Applicable to	Applicable to	Yes	No	Yes	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Yes	Yes	Amend

Section 27.4 Overview	
Is landscape protection relevant and necessary?	Landscape protection is both relevant but not necessary.
Is there fragmentation in the intra-chapter/section policy framework?	There is significant fragmentation. There are no landscape-relevant objectives, policies, methods or environmental results anticipated for Issue 27.4.1.3 to relate to.
Which risky activities are accounted for or managed and which aren't?	No activities are accounted for or managed.
Which landforms and landcovers are accounted for or managed and which aren't?	No landforms or landcovers are accounted for or managed.

Section 27.6: Natural Character, Landscape, Cultural, Recreational and Amenity Values

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
27.6.1.1	Issue – No	Applicable to	Applicable to	Yes	No	No	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Yes	Yes	Amend
27.6.1.2	Issue – No	Applicable to	Applicable to	Yes	No	Yes	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Yes	Yes	Amend
27.6.1.6	Issue – No	Applicable to	Applicable to	Yes	No	Yes	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Yes	Yes	Amend
27.6.3.1	Policy – Yes	Applicable to	Applicable to	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Amend
27.6.30	Explanation – No	Applicable to	Applicable to	Yes	No	Yes	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Yes	Yes	Amend

Section 27.6 Overview	
Is landscape protection relevant and necessary?	Landscape protection is both relevant and necessary.
Is there fragmentation in the intra-chapter/section policy framework?	There is significant fragmentation. There are no landscape-relevant objectives, methods or environmental results anticipated for Issues 27.6.1.1, 27.6.1.2 and 27.6.1.6, and Policy 27.6.3.1 to relate to.
Which risky activities are accounted for or managed and which aren't?	Most activities are accounted for and managed.
Which landforms and landcovers are accounted for or managed and which aren't?	All landforms and rivers, estuaries and riparian vegetation are managed. The other landcovers are accounted for but only managed if they are near or include rivers, estuaries and riparian vegetation.

Section 28.2: Dams and Weirs

Provision Reference	Content	National Context		Measurement of the Landscape			Regulation of Risky Activities					Purpose of the Provision		
		Refers to ONFLs?	Refers to the coastal landscape	Measures landscape characteristics?	Identifies ONFs and ONLs?	Identifies risky activities?	Subdivision	Earthworks	Land surface modification	Vegetation modification	Coastal occupation	Should it be there?	Can it apply?	Recommended action
28.2.20	Reason – No	Applicable to	Applicable to	Yes	No	Yes	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Yes	Yes	Amend

Section 28.2 Overview	
Is landscape protection relevant and necessary?	Landscape protection is both relevant and necessary.
Is there fragmentation in the intra-chapter/section policy framework?	There is significant fragmentation. There are no landscape-relevant issues, objectives, policies, methods or environmental results anticipated for
Which risky activities are accounted for or managed and which aren't?	No activities are accounted for or managed.
Which landforms and landcovers are accounted for or managed and which aren't?	No landforms or landcovers are accounted for or managed.

4.3 Part 3 Summary: TRMP Review Overview

The aggregated assessments show that there is a moderate to high degree of policy-level support for landscape protection across all land areas. This support is most highly developed around land surface modification and coastal occupation. In contrast, there is little such support for landscape protection at the rule level. The single exception is for land surface and vegetation modification in high vegetation land areas.

Coastal Land and Open Sea					
	Subdivision	Earthworks	Land Surface Modification	Vegetation Modification	Coastal Occupation
Policy-level Support	Moderate	Moderate	High	High	High
Rule-level Support	Low	Low	Low	Low	Low

Rivers, Estuaries and Riparian Vegetation					
	Subdivision	Earthworks	Land Surface Modification	Vegetation Modification	Coastal Occupation
Policy-level Support	Moderate	Moderate	High	Moderate	High
Rule-level Support	Low	Low	Low	Low	Low

Low Vegetation and Landcover					
	Subdivision	Earthworks	Land Surface Modification	Vegetation Modification	Coastal Occupation
Policy-level Support	Moderate	Moderate	High	Moderate	High
Rule-level Support	Low	Low	Moderate	Moderate	Low

High Vegetation					
	Subdivision	Earthworks	Land Surface Modification	Vegetation Modification	Coastal Occupation
Policy-level Support	Moderate	Moderate	High	Moderate	Moderate
Rule-level Support	Low	Low	Low	Low	Low

Urban Cover					
	Subdivision	Earthworks	Land Surface Modification	Vegetation Modification	Coastal Occupation
Policy-level Support	Moderate	Moderate	High	Moderate	High
Rule-level Support	Low	Low	Low	Low	Low

5.0 Conclusion

As stated in chapter 1.0 Purpose, this Risk Assessment:

- a) Assesses the risks of subdivision and land use and development activities on landscape characteristics in generalised types of land areas; and
- b) Assesses the risks of subdivision and land use and development activities on landscape characteristics with reference to potential ONF and ONL overlay locations in Golden Bay; and
- c) Reviews the capacity for risk management in existing TRMP chapters and sections.

Part 1 of the Risk Assessment devised several categories to assess the general patterns of risk. These were six activity types, four landscape characteristic groupings and five generalised land area types:

- a) Subdivision and Land Use and Development Activities
 - i. Subdivision
 - ii. Earthworks
 - iii. Land Surface Modification
 - iv. Vegetation Modification
 - v. Coastal Occupation
- b) Landscape Characteristics
 - i. Natural Features
 - ii. Transient Qualities
 - iii. Aesthetic Qualities
 - iv. Associative Characteristics
- c) Land Areas
 - i. Coastal Land and Open Sea
 - ii. Rivers, Estuaries and Riparian Vegetation
 - iii. Low Vegetation and Landcover
 - iv. High Vegetation
 - v. Urban Cover

The general patterns revealed subdivision, earthworks, large land surface modifications, and large coastal occupations as quite risky. All activities were less risky in high vegetation than in other landcovers, primarily due to significant public ownership of high vegetation land, by the Department of Conservation.

Part 2 of the Risk Assessment applied the assessment methodology devised in Part 1 to some 16 Specific Locations within Golden Bay, including five ONFs identified in the Small Group's

July 2015 report. Each locational risk assessment displays the three layers of information used to assess risk: landform, landcover, and ONFL overlays for its Specific Location.

Part 3 of the Risk Assessment reviewed those provisions, sections and chapters of the TRMP which mentioned landscape. The Review assessed the relevance and necessity of provisions, the degree internal fragmentation of policies and rules, and which risky activities were either accounted for or managed and where. The general patterns revealed that policy-level support was adequate but rule-level support was inadequate, across all risky activities and landcovers.

This Risk Assessment provides an evidential basis for any ensuing regulatory proposals aimed at improving landscape protection for Outstanding Natural Features and Landscapes. Further draft or proposed plan changes will stem from the findings of this Risk Assessment.

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7.0 Appendices

7.1 Appendix A: Landform and Landcover Methodology

The Risk Assessment assesses land across five generalised landcovers, including the influence of landform (elevation and slope). These generalisations only consider the visual factors such as elevation, slope, natural landcover, man-made landcover and the presence of water. Other factors such as soil composition and geological composition are not considered. Appendix A describes the methodology behind the landform and landcover generalisations.

The NZ Landscape Classification¹ classifies landscapes at the lowest level of detail across three criteria: landform, landcover, and the influence of water.

1 Landform

Landform under the NZ Landscape Classification is generalised as plains, hills, mountains, plateaus and other macro morphological landforms.² Such classifications are further divided with criteria such as slope, relief and profile.³ The Tasman Atlas describes landform through elevation and slope, with overlap between the two.⁴ For the purposes of generalising the land areas within Golden Bay terrestrial land is generalised as either low-lying land high-lying land. This division is decided by a combination of both elevation and slope. Low-lying land consist of land no higher than 200m above sea level with a slope of less than 20 degrees, and high-lying land consists of land higher than 200m above sea level or land with a slope greater than 20 degrees.⁵

2 Landcover and the Influence of Water

Landcover under the NZ Landscape Classification has numerous categories, including varying forms of vegetation, urban cover, major water bodies and agricultural uses.⁶ Furthermore, the NZ Landscape Classification differentiates exotic and indigenous vegetation, low and high producing grasslands and tussock, and intensively and extensively farmed land.⁷ The Tasman

¹ Lars Brabyn, *New Zealand Landscape Classification Version II – A Classification of Visual Landscape Character* (Hamilton, New Zealand: The University of Waikato, 2009), 3-4.

² Lars Brabyn, *New Zealand Landscape Classification Version II – A Classification of Visual Landscape Character*, 7-10.

³ Lars Brabyn, *New Zealand Landscape Classification Version II – A Classification of Visual Landscape Character*, 9.

⁴ James Dillon, *Tasman Atlas* (Nelson, New Zealand: Tasman District Council, 2011), Map 2 Elevation and Map 3 Slope.

⁵ James Dillon, *Tasman Atlas*, Map 2 Elevation.

⁶ Lars Brabyn, *New Zealand Landscape Classification Version II – A Classification of Visual Landscape Character*, 11-12.

⁷ Lars Brabyn, *New Zealand Landscape Classification Version II – A Classification of Visual Landscape Character*, 11.

Atlas makes classifications with a lower level of detail.⁸ For the purposes of generalising land areas within Golden Bay, landcover is generalised as low vegetation and landcover, urban cover, high vegetation, and riparian and coastal vegetation. These classifications of landcover broadly separate landcover by their visual impact; the differences between forest cover and tussock are generalised as a matter of height, and the differences between built up cover and the others are generalised as the absence of vegetation. Harvested plantation forest is viewed as low vegetation and landcover but the assessment of plantation forestry is appropriate to the land use activity. Shrubland and scrub heights vary between low vegetation and landcover and high vegetation, but are assessed within high vegetation.

The Influence of water under the NZ Landscape Classification has various classifications such as open and enclosed sea, estuaries and rivers, coastal islands and lakes of varying sizes.⁹ The Tasman Atlas defines only major rivers in Golden Bay, such as the Takaka and Aorere Rivers, and their catchments.¹⁰ For the purposes of generalising the land areas within Golden Bay, the influence of water is generalised as open sea, and rivers and estuaries, and is grouped with landcover. Landcover of riparian and coastal vegetation is considered a component of coastal land and open sea, and rivers and estuaries rather than low vegetation and landcover, or high vegetation.

3 Resultant Landforms and Landcovers

There are six generalised landforms and landcovers:

1. Low-Lying Land and High-Lying Land

This landform describes the elevation and slope of terrestrial land. Low-lying land generally consists of plains and valleys, whereas high-lying land generally consists of hills, plateaus and mountains.

2. Coastal Land and Open Sea

This landcover describes land near the ocean and the ocean itself. The open sea and coast generally consist of open water through to land 200 metres inland of mean high water springs, and including coastal vegetation.

3. Rivers, Estuaries and Riparian Land

This landcover describes land near rivers and estuaries. Rivers and Estuaries generally consist of freshwater bodies and where they connect to the open sea, and land and vegetation bordering those water bodies.

⁸ James Dillon, *Tasman Atlas*, Map 10 Landcover.

⁹ Lars Brabyn, *New Zealand Landscape Classification Version II – A Classification of Visual Landscape Character*, 13-14.

¹⁰ James Dillon, *Tasman Atlas*, Map 1 Topography and Map 9 River Environments.

4. Low Vegetation and Landcover

This landcover describes land that has neither forest cover or urban cover. Low vegetation and landcover generally encompasses most rural land uses such as dairy farms and orchards, uncovered gravel or rock and tussock grassland.

5. High Vegetation

This landcover describes land that has forest cover or shrubland cover. High vegetation generally encompasses vegetation such as indigenous and exotic forest, shrublands and scrub, and plantation forestry.

6. Urban Cover

This landcover describes land that has been significantly modified. Urban cover generally includes land covered by housing and commercial buildings, roads, and urban parks.

7.2 Appendix B: Landforms and Landcovers applied to Golden Bay Locations including Overview Maps

In order to apply the generalised landforms and landcovers within Golden Bay, the landforms and landcovers were mapped. Map 1 shows elevation and slope generalised into low-lying land and high-lying land. Map 2 shows landcovers. Map 3 identifies certain locations which are assessed within Appendix B as examples of applying this Risk Assessment.

1 Map 1 – Landform

Landforms were generated through existing elevation and slope data, and delineated as such:

- Low-lying land includes those areas less than 200m above sea level AND less than 20 degrees in slope
- High-lying land are those areas higher than 200m above sea level AND/OR greater than 20 degrees in slope

2 Map 2 – Landcovers

Data for landcover and the influence of water was retrieved through the Landcover Database 4.1 (LCDB 4.1). The LCDB 4.1 includes numerous landcover categories of its own, which were grouped together into the following resultant landcover categories:

1. Coastal Land and Open Sea was not classed in the LCDB 4.1.
2. Rivers, Estuaries and Riparian/Coastal Vegetation consists of Presence of Water Group and Riparian and Coastal Vegetation Group. The former consists of Estuarine Open Water, Lake or Pond, and River. The latter consists of Herbaceous Freshwater Vegetation and Herbaceous Saline Vegetation.
3. Low Vegetation and Landcover consists of Alpine Grass/Herbfield, Gravel or Rock, High Producing Exotic Grassland, Low Producing Grassland, Orchard, Vineyard or Other Perennial Crop, Sand or Gravel, Short-rotation Cropland, and Tall Tussock Grassland.
4. High Vegetation consists of Forest - Harvested, Broadleaved Indigenous Hardwoods, Exotic Forest, Indigenous Forest, and Manuka and/or Kanuka.
5. Urban Cover consists of Built-up Area (settlement), Transport Infrastructure, Urban Parkland/Open Space, and Surface Mine or Dump.

Map 2 shows a separate category called Shrublands and Scrub. This consists of Fernland, Flaxland, Matagouri or Grey Shrub, Mixed Exotic Shrubland, Sub Alpine Shrubland, and Gorse and/or Broom. This grouping is assessed within high vegetation but can be treated under low vegetation and landcover as appropriate.

3 Map 3 – Example Locational Assessments

Map 3 lists 16 locations within Golden Bay which will be used as examples for applying the Risk Assessment. These 16 examples are further organised into five groups. The first four of these groups share assessments due to their similar landform and landcover compositions. The fifth group assesses ONFs identified in the Small Group's July 2015 draft report.

- a) Rivers and Estuaries
 - Big River Estuary
 - Anatori River
 - Ruataniwha Inlet
 - Wainui Bay Inlet

- b) Mountains
 - Mount Burnett
 - Parapara Peak
 - Mount Evans

- c) Inland Lakes
 - Boulder Lake
 - Lake Stanley

- d) Coastal Locations
 - Collingwood
 - Tarakohe Cliffs

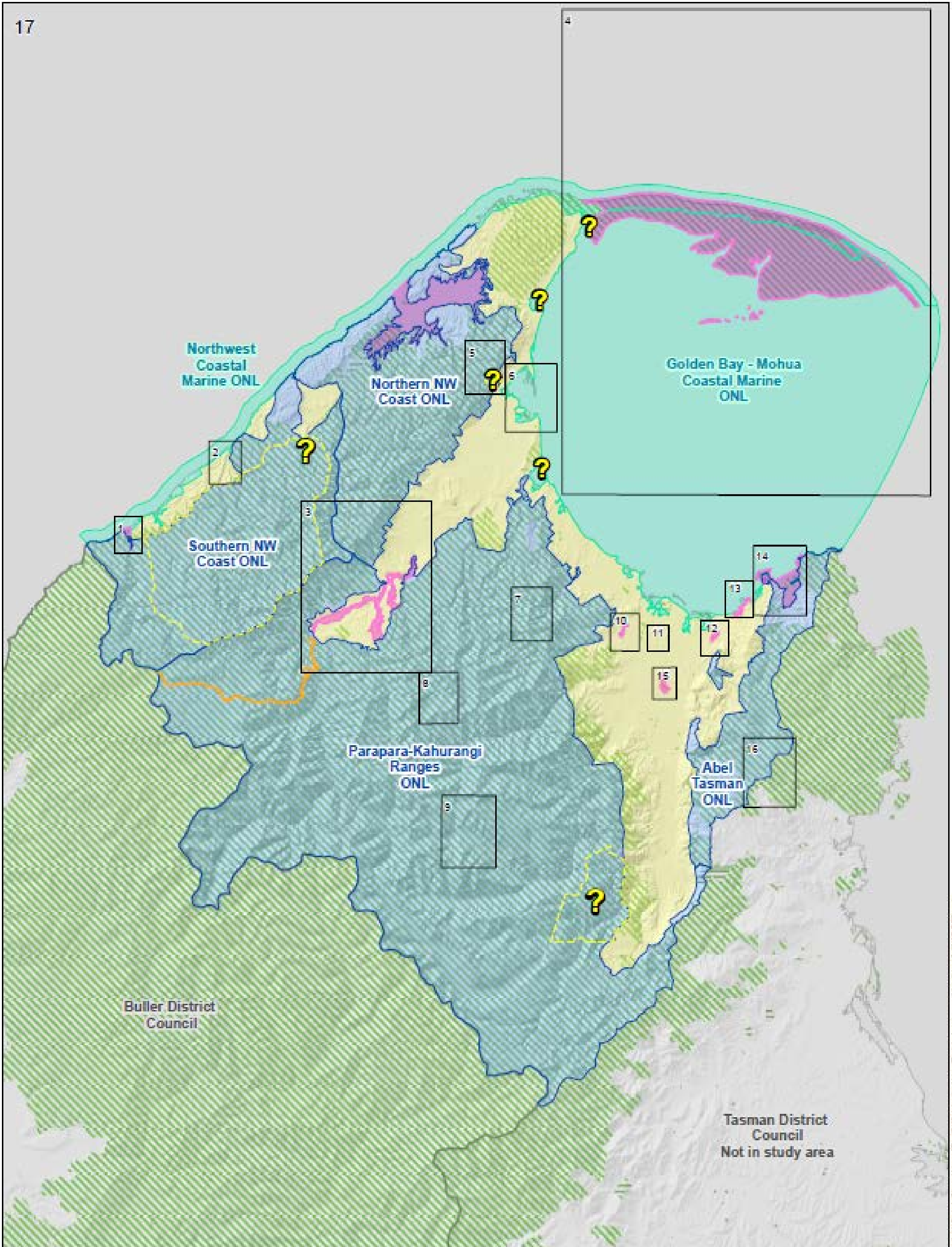
- e) Identified ONFs
 - Farewell Spit
 - Aorere River Gorge and Tributaries
 - Te Waikoropupu Springs
 - Paynes Ford
 - The Grove

Table of specific locations and their applicable landforms and landcovers

		Low-Lying Land	High-Lying Land	Coastal Land and Open Sea	Rivers, Estuaries and Riparian Vegetation	Low Vegetation and Landcover	High Vegetation	Urban Cover
Rivers and Estuaries	Big River Estuary	X	X		X	X	X	
	Anatori River	X			X	X	X	
	Ruataniwha Inlet	X			X	X		X
	Wainui Bay Inlet	X	X		X	X	X	
Mountains	Mount Burnett		X				X	X
	Parapara Peak		X			X	X	
	Mount Evans		X				X	
Inland Lakes	Boulder Lake		X		X	X	X	
	Lake Stanley		X		X	X	X	
Coastal Locations	Collingwood	X			X	X		X
	Tarakohe Cliffs	X	X	X		X		X
Identified ONFs	Farewell Spit	X		X		X	X	
	Aorere River Gorge and Tributaries	X	X		X	X	X	
	Te Waikoropupu Springs	X			X		X	
	Paynes Ford	X			X	X	X	
	The Grove		X				X	

17

4



ONL and OFL Overview

- Legend**
- ONL
 - ONL-Marine
 - DOC Estate
 - ONL Unconfirmed
 - NOT ONL
 - ONF
 - QEII Covenants
 - Roads



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