



WAINUI BAY LANDSCAPE EXPERT PANEL WORKSHOP

22 & 23 SEPTEMBER 2014

WORKSHOP NOTE:

These notes were put together following a workshop at the Pohara Boat Club in September 2014.

Participants were tasked with

- Establishing a preferred methodology for assessing the Extent of the Coastal Environment, Coastal Natural Character and Outstanding Natural Landscapes & Features;
- Using the methodology to undertake an assessment on Wainui Bay.

DOC experts and Tasman District Council officers presented background material, and notes were made on a flip chart by the facilitator. These were written up by the individual participants and supplemented by their personal notes. The final set of notes represents observations and the information presented over the two days, without any further research or additional documentation.

The initial maps were created at the Pohara Bay workshop by tracing over a Google image shown onto a flipchart. The resulting 'maps' were photographed and recreated for this report using the same Google base. The maps are illustrative and should not be considered to be definitive in terms of accuracy of boundary locations.

WAINUI BAY LANDSCAPE WORKSHOP NOTES

1.0 BACKGROUND

A workshop was held at the Pohara Boat Club on 22 and 23 September 2014 to discuss the following:

- A preferred methodology for assessing the Extent of the Coastal Environment;
- A preferred methodology for assessing Coastal Natural Character;
- A preferred methodology for assessing Outstanding Natural Landscapes & Features;
- Undertaking an assessment under these methods to ascertain the values and effects at Wainui Bay, Golden Bay, particularly in relation to an existing marine farm harvesting mussel spat.

The following people attended the workshop for the full two days: Steve Markham (TDC); Shelagh Noble (TDC); Roz Squire (TDC); Rod Witty (DOC); Quentin Davies (Gascoigne Wicks) and Landscape Architects: Gavin Lister (Isthmus); Julia Williams (Drakeford Williams); Dennis Scott (DJ Scott); John Hudson (Hudson Associates) and James Bentley (Boffa Miskell).

Shannel Courtney (DOC) and Greg Knapp (DOC) attended for only part of the first day.

A boat trip was undertaken to Wainui Bay and the spat farm during the morning of the first day and a further site visit via road was undertaken during the morning of the second day. Both site visits enabled the group to get a better understanding of the landscape and natural character of Wainui Bay.

2.0 EXTENT OF THE COASTAL ENVIRONMENT

James presented the methodology used to identify the extent of the coastal environment for the Marlborough Coastal Study.

2.1 New Zealand Coastal Policy Statement

Reference was made to Policy 1 of the New Zealand Coastal Policy Statement (NZCPS) 2010 and its associated characteristics. Acknowledgement was made that neither the NZCPS nor the RMA define the term 'coastal environment'.

The list of characteristics in the NZCPS is helpful, however, it is not absolute and does not provide an answer on how to define the landward extent of this environment, particularly as there are 'grey areas' in relation to many of the characteristics that make it difficult to draw a 'hard line'. DOC has provided guidance material (2012) on implementing Policy 1, which reflects best practice. Environment Court decisions to date have also assisted to form an overall judgement as to the extent of the coastal environment.

2.2 Preferred Methodology: Extent of the Coastal Environment

The methodology used for Marlborough recognised that the coastal environment is a dynamic system where the inland influence of coastal elements and processes on the environment gradually decreases with distance.

In applying the methodology, the study team for Marlborough addressed all the characteristics of the coastal environment listed in NZCPS 2010 Policy 1(2) (see above) but gave particular consideration to “*where coastal processes, influences or qualities are significant*” as this provides the clearest and strongest direction for interpreting the coastal extent. This appeared consistent with the 2014 decision released by the Supreme Court for EDS v New Zealand King Salmon.

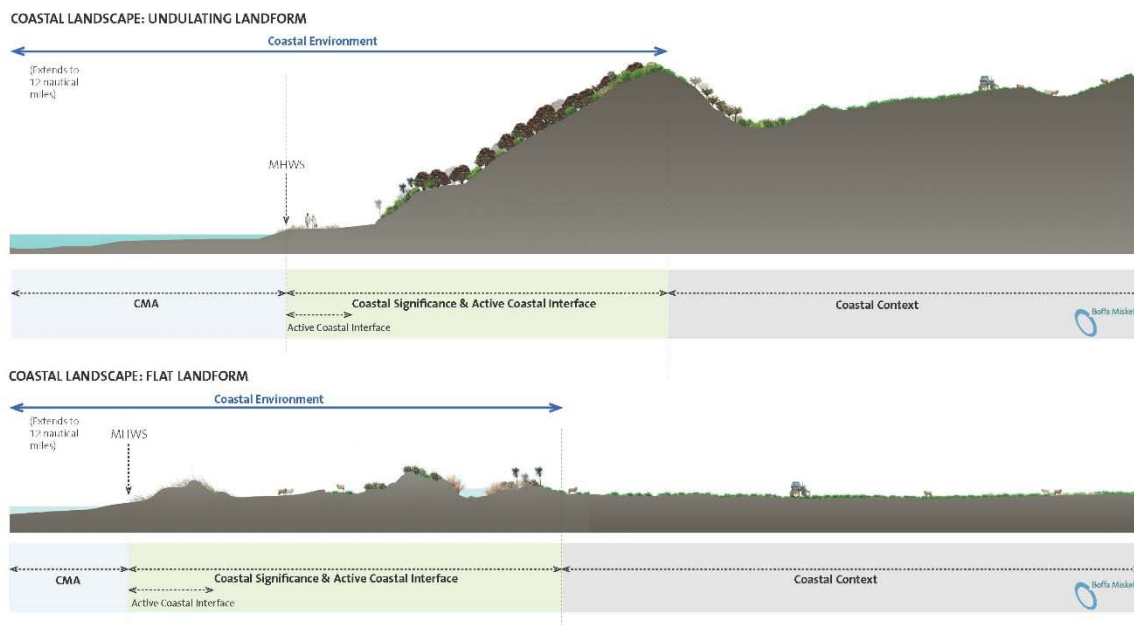
The seaward extent of the coastal environment extends 12 nautical miles from MHWS (Mean High Water Springs Mark). Identifying the landward extent for Marlborough relied on relevant and accessible data available to inform judgements. Data included specialist terrestrial and freshwater ecological advice, geomorphology aspects as well as data received from council including consents and heritage and cultural values. Professional knowledge and judgement underpinned the assessment.

Based on this a model was developed, based on three zones:

- Zones A and B (the coastal marine area and the coastal significance zone), which make up the Coastal Environment; and
- Zone C, the Coastal Context.

Coastal Landscape	Coastal Environment	Zone A	This zone includes the Coastal Marine Area (CMA) . Within the statutory context the CMA means the foreshore, seabed and coastal water and the air above the water to twelve nautical miles (or the territorial sea boundary. Inland, the CMA extends to the mean high water spring (MHWS). The CMA includes the rock, beach, coastal lagoons and lakes below MHWS. The CMA extends approximately 1km upstream of a river or a point that is calculated by multiplying the width of the river mouth by five.
		Zone B	The Coastal Significance Zone includes the Active Coastal Interface (land above MHWS) and generally includes land up to the summit of the first coastal ridge/ crest or escarpment (with the width of this zone varying depending on the topographic environment). The Active Coastal Interface is generally a slender component of the Coastal Significance Zone where the sea is the dominant element and the primary or significant influence on landform, vegetation and perception. This zone is where coastal processes are significant and may include cliffs, settled (or modified) dune lands, farm land, settlements and coastal forests. This may also be termed the Coastal Terrestrial Area .
	Coastal Context	Zone C	Coastal Context. This area is where coastal elements, patterns and processes have an influencing presence on the coastal landscape and would include developed dune ridges which no longer exhibit significant coastal processes plus coastal plains, and hill-slopes. This zone generally extends inland from Zone B to where coastal influences are sufficiently diminished. It is also recognised that some activities occurring within this zone can significantly affect the coastal environment (Zones A and B), either experientially or physically, to varying degrees. The inland extent of Zone C will not be identified, as it falls outside of the Coastal Environment.

The following diagram outlines two representative coastal scenarios.



Outcome of workshop: Participants agreed to adopt this method for the purposes of assessing the extent of the coastal environment for Wainui Bay.

3.0 COASTAL NATURAL CHARACTER

James presented the methodology used to identify coastal natural character for the Marlborough Coastal Study.

3.1 Theory

3.1.1 NZCPS definition of *Naturalness*

Reference was made to Policy 13 of the New Zealand Coastal Policy Statement (NZCPS) 2010 and its associated characteristics. Acknowledgement was made that neither the NZCPS nor the RMA define the term 'natural character'.

Policy 13 Guidance Note (page 24) contained a definition of natural character:

'Natural Character is the term used to describe the natural elements of all coastal environments. The degree or level of natural character within an environment depends on:

1. *the extent to which the natural elements, patterns and processes¹ occur and;*
2. *the nature and extent of modification to the ecosystems and landscape/seascape.*

The degree of natural character is highest where there is least modification.

The effect of different types of modification upon natural character varies with context and may be perceived differently by different parts of the community.’²

The group stated that this isn’t a definition, however was helpful in articulating the concept. The group also felt that the last component of the statement above was confusing.

3.1.2 Boffa Miskell definition of *Naturalness*

James outlined the theory of naturalness used for the Marlborough Study which was developed by Boffa Miskell:

“A measure of the degree of human modification of a landscape/ seascape or ecosystem expressed in terms of:

- i) ecological naturalness (indigenous nature);*
- ii) landscape naturalness (perceptions of nature).”*

A rating of very high to very low (i.e. a seven point scale) was used for Marlborough. This is consistent with findings from the court.

The group also confirmed that natural character:

- Is scale dependant (i.e. natural character can occur at a range of scales);
- Can be adopted to suit a range of coastal environments;
- Requires the input of terrestrial, freshwater and marine ecologists and other natural scientists (e.g. geomorphologists), as well as the input of landscape architects and planners;
- Occurs on a continuum from highly modified to pristine;
- The fact that the highest degree of natural character (greatest naturalness) occurs where there is least modification/ uncluttered by obvious or disruptive human influence; and
- Recognition that the degree of natural character is context-dependent and can change over time.

¹ For the purposes of interpreting the NZCPS 2010 Policy 13.2, ‘*elements, patterns and processes*’ means: biophysical, ecological, geological and geomorphological aspects; natural landforms such as headlands, peninsulas, cliffs, dunes, wetlands, reefs, freshwater springs and surf breaks; and the natural movement of water and sediment.

² Department of Conservation Natural Character Workshop Minutes; 2 August 2011(DOCDM-795012)

3.1.3 QINNCE

There was discussion about whether QINNCE was sufficient to describe natural character. QINNCE is a disciplined reductive exercise and provides a good database of biophysical elements and ecological naturalness. However it is not adequate for assessing landscape naturalness.

3.2 Preferred Methodology: Coastal Natural Character

For the purposes of evaluation, the preferred methodology is that the Marine and Terrestrial Areas are separated to allow for a more robust assessment. This division is consistent with the coastal environment diagram (i.e. Coastal Marine Areas (CMA's) and Coastal Terrestrial Areas, CTA's).

That three broad attributes can be used:

- Abiotic (non-living)
- Biotic (living)
- Experiential (perceptual)

There is no weighting of attributes. These attributes cover all aspects of Policy 13.

An overall judgement is then made as to the rating for each Coastal Terrestrial Area and Coastal Marine Area. From then an overall evaluation is made as to the natural character of the area (in this case the defined visual catchment of Wainui Bay). This overall evaluation of outstanding Natural Character is assessed separately from the continuum (i.e. very low to very high) and includes a reassessment of the CTA's and CMA's that rate high or very high.

Under the methodology (used for Marlborough), an area of outstanding natural character must:

'exhibit a combination of natural elements, patterns and processes that are exceptional in their extent, intactness, integrity and lack of built structures (the 'clutter' factor) and other modifications compared to other areas in the Marlborough Region.'

It was also determined that outstanding natural character should combine both terrestrial and marine components so that important sequences of ecological naturalness (such as from the top of a ridge above sea level to the bottom of the adjacent sea and interconnected systems) are considered.

Outcome of workshop: Participants agreed to adopt this method for the purposes of assessing coastal natural character for Wainui Bay. Discussion took place on outstanding natural character thresholds, however it is understood that the concept of separating 'outstanding' from the continuum was accepted.

4.0 OUTSTANDING NATURAL LANDSCAPES AND FEATURES

Gavin presented a preferred methodology/best practice for assessing outstanding natural landscapes and features

4.1 Introduction

The preferred methodology for assessing outstanding natural landscapes and features (ONFL) requires a four-stage process:

- i. Definition of 'landscape';
- ii. Analysis of landscape characteristics;
- iii. Overall synthesis (or appraisal) of landscape character; and
- iv. Assessment of ONFL

4.2 Definition of 'Landscape'

The definition should be the starting point of the assessment method.³ The NZILA Best Practice Guide⁴ recommends the following definition:

'Landscape is the cumulative expression of natural and cultural features, patterns and processes in a geographical area, including human perceptions and associations'

The European Landscape Convention adopts a similar definition:

'An area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors.'

The following points can be taken from these definitions:

- A landscape is a **geographical area** (not just a view);
- Landscape involves both the **physical aspects** and peoples' **appreciation** of them;
- Appreciation entails **perceptual** (sensory) and **associative** aspects; and
- Landscape **character** is a **combination** of aspects (not a catalogue).

By way of example, Cape Reinga includes:

Physical aspects (its geomorphology, ecological communities and processes);

Perceptual aspects (the vividness and memorability of the cape's features including its accentuation by the lighthouse); and

³ So definitions need to provide precise description of the phenomena

⁴ New Zealand Education Foundation, 2 November 2010, 'Best Practice Note 10.1: Landscape Assessment and Sustainable Management'

Associative aspects, including such meanings as ‘end of the land’ and (Maori mythology) departing point of the spirits.

Such definitions are supported by Environment Court or Board of Inquiry decisions. For example the Hauauru ma Raki Board of Inquiry decision⁵ noted that:

‘We find that landscape is A biophysical entity

And it is valued, used and modified by people

And it is also perceived and experienced by people’ (para. 612)

The WESI decision noted that “‘landscape’ involves both **natural and physical resources** themselves and also various factors relating to the viewer and their **perception of the resources.**”⁶

4.3 Analysis of Landscape Characteristics

4.3.1 The NZILA ‘Best Practice Guide’ suggests analysing landscapes in terms of the following three **attributes** (which are traced back to the definition of landscape):

- Biophysical elements, patterns, and processes
- Sensory qualities
- Associative meanings

While practitioners have used different terms to describe these attributes (which is confusing at first glance and should be standardised), the terms generally cover similar matters. The following matrix lists examples of schema using different terms to describe similar things:

Biophysical	Sensory	Associative
Natural science factors	Aesthetic value	Socio-cultural factors
Biophysical	Perceptual	Associative
Biophysical	Perceptual and Experiential	Relationships and Values
Physical attributes / natural science factors	Aesthetic values	Associations
Biophysical landscape (natural science) characteristics	Perceptual / aesthetic values	Associational values
Bio-geographical	Perceptual	Associative or relationship contributions

⁵ Final Report and Decision of the Board of Inquiry into the Hauāuru mā Raki Wind Farm and Infrastructure Connection to Grid,

⁶ Wakatipu Environmental Society Inc vs The Queenstown-Lakes District Council, C180/99, paragraph 77

It was noted in passing that the three main attributes might roughly correlate with different types of investigation respectively: natural sciences; evolutionary psychology; and humanities.

Such a three attribute approach is now widely used by practitioners for landscape analysis and has also been supported in decisions of the Environment Court or Boards or Inquiry. For example the 'Upper Clutha Tracks' decision⁷ noted that:

*'The Lammermoor description seems to correspond generally with contemporary landscape practice in describing a landscape as having **three sets of components**:*

- the **biogeographical** elements, patterns and processes;
- the **associative** or relationship contributions; and
- the **perceptual** aspects.' (emphasis added) (para. 51)

4.3.2 Typical **factors** can be listed under each of the **main attributes**, as outlined in the following table.

Main attributes	Typical factors to take into account
Physical (Biophysical, Natural features, patterns and processes)	Natural Geology, geomorphology, and resultant topography Hydrology (drainage features and processes) Soil and vegetation Ecology Human ('Cultural') ⁸ Road networks Settlements Land use
Perceptual (Aesthetic, Sensory, Experiential)	Legibility (geomorphology) –for instance how vividly the landscape expresses geomorphic processes) Legibility (way-finding and orientation) –for instance the distinctiveness (memorability) and location of landmarks, distinctiveness of different character areas and their boundaries Visibility (public and private views) Picturesqueness (including such aspects as the presence of water, contrast of shadow and light, perspective depth, mix of openness and vegetation) Coherence (including the intactness of natural vegetation (where relevant), or the extent to which human overlays

⁷ Upper Clutha Tracks & ors v D Thorn, NZRMA 432

⁸ Such human or cultural factors are less relevant if one is assessing natural landscapes for the purpose of s6(b) matters. They are included primarily because the table applies to assessment of all landscapes. However, human management and features may be present in ONFLs so long as the natural processes and patterns are dominant. In such instances the manner in which human aspects relate to the natural setting is relevant.

Main attributes	Typical factors to take into account
	reflect the underlying natural landform)
Associative (Relationships, Meanings, Socio-cultural)	Historical associations with the landscape, where relevant to appreciation of the landscape itself Tangata whenua associations with landscape, where relevant to appreciation of the landscape itself Recreational uses based fundamentally on landscape qualities Emblematic aspects (for instance where a feature has been adopted as an icon for a community)

Note: Account should be taken of characteristics that may be only occasionally or seasonally present (such as wildlife or snow) i.e. the so-called 'transient factors'

The factors listed in the right hand column of the table above could all be written as criteria (i.e. in a way that enables measurement against an objective or benchmark). However, it becomes obvious that there are many factors, and an almost **endless number of ways of constructing criteria**.

A benefit of the simpler three attribute approach is that it:

- **Accommodates** a variety of such **detailed schema**, such as the 'Pigeon Bay Criteria', or the 'Lammermoor List', or practitioners' individual schema;
- **Avoids** the temptation to treat detailed schema as '**formulae**';
- Is **open-ended**, so that it can accommodate things that may be pertinent only to a particular context (and which might otherwise be overlooked); and
- Is a way of linking the detailed factors back to the overall landscape.

4.4 Synthesis

Analysing landscapes in terms of their attributes as discussed above is a **reductive but important discipline**.

However, **landscape is not a catalogue**: it is the **components interacting cumulatively as a whole**. Therefore one has to stand back and make an **overall description and appraisal**. At this level the physical, perceptual and associative attributes cannot be separated. There is no arithmetic formula. The whole may be more (or less) than the sum of the parts.

To illustrate the point the comment was made that "**we see more when we know more.**"

Such an approach is supported by the Unison Networks decision⁹ of the Environment Court, which agreed that **“every factor may not be relevant in each case, and they do not need to be given equal weight. There is no formula. ...an overall assessment is required, taking the factors into account.”** (emphasis added) (para. 95). The Court went on to say:

*‘it is important to avoid settling upon a mere formulaic framework that could simply be ‘fed through’ in a computerised fashion. Ultimately each case must be considered in the light of dependable and recognised pointers or guiding criteria to **assist the making of an overall appraisal and judgment** without the risk of professional landscape architects failing to see the wood for the trees.’* (emphasis added) (para. 96)

4.4.1 Justification

It is important to **explain the reasons** behind an overall appraisal. The **justification** for the overall assessment **is in the description and reasons given**. One can’t hide behind a methodology.

4.4.2 7-Point Scale

It can be a useful discipline to rate landscapes or their attributes. A seven point scale (below) is recommended in the interests of standardisation.¹⁰ Words should be used in preference to numbers to reduce the temptation to use scores in a formulaic way.

very low	low	mod-low	mod	mod-high	high	very high
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4.4.3 Spatial Scale of Assessment

The **spatial scale should relate to the purpose of the assessment**.

For the purpose of assessing effects of a proposal the assessment should be at the smallest scale that can provide a proper context. For example, if considering the landscape effects of the Wainui marine farm the proper scale is the Wainui Bay landscape as a whole. The effects should not be **diluted** by considering the effects in too broad a context (such as on Golden Bay as a whole). Neither should they be **concentrated** on too narrow a context.

The point was made, though, that the wider context for a landscape still needs to be taken into account.

(Outstanding natural features and landscapes are to be assessed in the context of the relevant District or Region –see below).

⁹ Unison Networks Ltd v Hastings District Council, W11/2009

¹⁰ The scale should be symmetrical around ‘moderate’. This scale is similar to that recommended in the NZILA Best Practice Guide but it uses only neutral terms (rather than ‘severe’ and ‘negligible’).

4.4.4 QINNCE

There was discussion about whether QINNCE was sufficient to describe the biophysical attributes of 'landscape'. QINNCE is a disciplined reductive exercise and provides a database of biophysical elements. However, for landscape purposes additional work is required to:

- Interpret the data in an **appropriate spatial context**;
- Consider the natural components as a **whole system**; and
- **Integrate** the data with the perceptual and associative aspects.

4.5 Assessing 'Outstanding Natural Features and Landscapes'

4.5.1 Assessing an ONF/ONL requires an **additional step over-and-above assessing landscape character**. For instance:

- i) analyse the landscape attributes (characteristics);
- ii) synthesise and describe the landscape character and significance as a whole; and then
- iii) make an **overall appraisal** as to whether it is 'outstanding' and 'natural'.

The only two criteria for ONF/ONLs are that they are 'outstanding' and 'natural'.

The term '**outstanding**' is the ordinary meaning of the word, such as 'conspicuous, eminent, excellent, remarkable'. The point was made to not get distracted by dictionary synonyms – come back to the word itself.

The term '**natural**' has a liberal definition in the way it has been applied in case law with regard ONF/ONLs. For instance, the WESI decision¹¹ says that the criteria for naturalness in terms of s6(b) include:

- relatively unmodified and legible physical landform and relief;
- the landscape being uncluttered by structures and/or obvious human influence;
- the presence of water (lake, river, sea);
- the presence of vegetation (especially native vegetation) and other ecological patterns.

In other words, (rightly or wrongly), 'natural' in terms of s6b as expressed in the criteria above means visual naturalness rather than (for instance) the integrity or intactness of natural systems.

4.5.2 Difference between 'ONF/ONLs' and 'natural character'

The point was made that the emphasis in '**outstanding natural landscape**' appears to be on '**outstanding**', whereas the emphasis in '**natural character**' is on '**natural**'. This may be the difference between 'natural character' and 'landscape' alluded to in NZCPS Policy 13 (2) –

¹¹ Wakatipu Environmental Society Inc vs The Queenstown-Lakes District Council, C180/99, paragraph 89

although the workshop participants consider that statement in the NZCPS seems contradictory in context (amongst others).

4.5.3 Delineating 'landscapes' and 'features'

It is important to be clear whether we are discussing 'features' or 'landscapes', to delineate them as **integrated** and **holistic** things, and avoid drawing arbitrary boundaries simply to exclude inconvenient qualities (such as mosaics of different land management).

- A **landscape** is an **area** that is perceived as a whole: either **experienced from within** or seen as the **whole of the outlook**. It often coincides with a catchment.
- A **feature** is a **discrete element** within a landscape (but that still has integrity as a whole element).
- Small landscapes can **nest** within larger landscapes.

4.5.4 Spatial Context in which to assess ONF/ONLs

Outstanding natural features and landscapes are to be assessed in the context of the relevant District or Region. This may mean:

Relative to **other actual features and landscapes**; and/or

Relative to **the characteristics that make the district special**. (For example, a fiord in Fiordland may have additional significance because it is part of a suite of fiords. Seeking to identify the most outstanding fiord in such a context would be wrong. An observation was made that the collective suite of fiords are a single outstanding natural landscape in the national context.)

'Outstandingness' has nuances of both **relativity** and **absolute quality**. For instance there is no 'quota' of ONF/ONLs for each district. It is not simply the best of whatever there is. Some districts may have a high proportion of landscapes of sufficient quality to be ONLs (such as Westland) or, alternatively, some districts may contain few (such as Napier or P. North).

Because 'outstandingness' has nuances of both **relativity** and **absolute quality**, it is not essential to assess all landscapes in a district in order to reach a conclusion about a particular landscape. In many instances it will be obvious whether a landscape is or isn't outstanding without needing to compare with every other landscape in a district. Comparison may be most useful for the borderline examples.

Outcome of workshop: Participants agreed to adopt this methodology for the purposes of assessing whether Wainui Bay as a whole or features within Wainui Bay are considered to be ONFL.

5.0 WAINUI BAY ASSESSMENT

5.1 Coastal Environment for Wainui Bay

It was agreed that:

- assessment could be made at a local 'Wainui Bay' scale.
- the definition of the Coastal Environment should be based on the methodology presented by James Bentley to include the Coastal Marine Zone plus the Active Coastal Interface plus the Coastal Terrestrial Area.

Participants agreed that the extent of the coastal environment should include the whole of Abel Tasman Head and extend southwards along the ridge to a point immediately south of the Inlet, where it follows a local descending spur towards the modified valley. The extent traverses eastwards over the pasture (but including all alluvial areas of the inlet) and extending up a spur to the enclosing ridge on the eastern side of the bay. The extent of the coastal environment then extends northwards along the ridge, including Gibbs Hill towards Taupo Hill.

Refer Appendix 2 map '*Wainui Bay Coastal Environment*' for final mapping .

Outcome of workshop: Participants agreed on the extent of the Wainui Bay coastal environment and this was mapped.

5.2 Coastal Natural Character for Wainui Bay

Based on the methodology, the workshop participants mapped the coastal environment of Wainui Bay into a number of Coastal Terrestrial Areas and Coastal Marine Areas and rated each one according to the three attributes (Abiotic/ Biotic and Experiential) using the rating scale below.

NATURAL CHARACTER RATING SCALE						
Very high	High	Moderately high	Moderate	Moderately low	Low	Very low

Overall evaluation

In regard to an overall rating of High Coastal Natural Character for the whole Bay, the workshop participants determined that in general, Natural Character on the east side of the bay is high, and Natural Character on the west side of the bay is moderate to high with an overall rating of High Coastal Natural Character for the whole Bay.

Although the existing marine farm affected the marine component of the Bay's Natural Character rating, land-based modifications including the road, houses, the dairy farming,

commercial forestry and presence of exotic flora were more obvious detractors to the naturalness of the Bay.

Refer Appendix 2 map '*Wainui Bay Natural Character*' for final mapping .

Outcome of workshop: Participants agreed that Wainui Bay does not have Outstanding Natural Character.

5.3 Wainui Bay assessment: Outstanding Natural Landscapes and Features

5.3.1 Spatial scale of characterisation and assessment

Participants agreed that:

- in an ideal situation, a district/regional assessment would be available to provide relevant information on the wider landscape context
- the assessment was made at a local scale but acknowledges the wider landscape context of Golden Bay and the location of Wainui Bay adjacent to Abel Tasman National Park, a regional ONL.
- the assessment was independent of any proposal to renew the consents for the Wainui Bay mussel spat farm.

5.3.2 Analysis of Landscape characteristics

Description and assessment undertaken for the Wainui Bay visual catchment, which includes the coastal environment, rather than the complete catchment for which there was less information and which is not visible, particularly in the higher reaches of the catchment.

A full description of Wainui Bay is provided in Appendix 1.

5.3.3 Overall evaluation/appraisal of Wainui Bay landscape

Wainui Bay is a well-defined bay landform, with alluvial flats on the valley floor contained between steep sided headlands that extend and curve inland, so that the upper end of the catchment is not visible from the water.

The underlying granite and limestone geology is reflected in the landform headlands, rock outcrops and islets, and the vegetation patterns. The west facing hill slopes (within Abel Tasman National Park) have kanuka/manuka/mahoe revegetating through gorse, with more established vegetation in the steeply incised gullies. The east facing hill slopes have a mosaic of vegetation, including plantation planting, advanced secondary forest in gullies and kanuka/manuka revegetation on the ridges. The valley floor is in pasture with established shelter and woodlot vegetation, and revegetation/restoration plantings on riparian edges.

The road into the bay is also the road into Abel Tasman National Park and Totaranui. It is cut into the hillside on the western side of the bay and an extreme weather event late in 2011 has led to extensive erosion on the steep weathered-granite cut faces above the road. Built development has remained within the valley floor and is limited to a small number of properties with a largely rural focus, and a handful of houses set into the bush on the western slopes overlooking the bay.

The inlet has a deep-water, shallow water and estuarine component; the estuarine environment is demarcated from the open water by sand spits to the north, and a pastoral landscape to the south. Estuarine values are outstanding and the vegetation patterns are intact although the sequences have been lost due to farming activity. The coastal edge is mostly intact with the exception of rock erosion control work on the shoreline at Takapou Point. A mussel spat farm is located just within the bay, in the lee of a cluster of distinctive outcrops and islets off Abel Tasman Point.

In summary, Wainui Bay has strong natural values, even though the natural ecology patterns and sequencing have been disturbed; this is most pronounced on the Abel Tasman headland and west facing hill slopes. However the valley floor and east facing hill slopes show distinct signs of human development in the form of the road and prominent dwellings sited high on the hillside above the bay, and the coastal erosion works below that distort the edge of the Takapou sandspit.

LANDSCAPE CHARACTER RATING SCALE						
Very high	High	Moderately high	Moderate	Moderately low	Low	Very low

Based on the agreed scale above, the Wainui Bay landscape character evaluation was as follows:

Biophysical Attributes: High*

Perceptual Attributes: High

Associative Attributes: Very High

*Participants agreed that the existing natural biophysical attributes have increasing values that are trending towards 'very high' under the current management regime.

5.3.4 Assessment of 'Outstanding Natural Features and Landscapes'.

The only two criteria for ONF/ONLs are that they are 'outstanding' and 'perceived to be natural', with an emphasis on the **outstanding**.

Abel Tasman National Park is a regionally recognised ONL that includes the entire northern headland and extends south and west into the upper catchment to partially wrap around and backdrop Wainui Bay. It was agreed that the eastern headland of Wainui Bay forms part of the Abel Tasman Park ONL but that Wainui Bay was not in itself a 'landscape'.

The entry to Wainui Bay including the headlands, outer harbour and enclosing hillslopes, inner harbour /estuary and coastal edge (the 'bay' form) was considered to be a 'feature'.

Participants agreed that:

- Wainui Bay included a cluster of features, some of which individually are outstanding but that the road, houses, spat farm reduced the biophysical and perceptual values.
- Water is a cohesive element within the feature
- Associative values pulled up the overall evaluation
- Entering from sea it is outstanding

The ONFL assessment was undertaken in terms of **absolute quality** and Wainui Bay feature reached a marginal threshold (Biophysical attributes: High; Perceptual attributes : High; Associative attributes: Very High)

Refer Appendix 2 map '*Wainui Bay Outstanding Natural Feature Assessment*' for final mapping .

Outcome of workshop: the 5 landscape architects could not decide whether the Wainui Bay coastal landscape was an ONF or not but agreed that the inability to reach a conclusion was due to the lack of contextual information on landscape values within Golden Bay and the wider Tasman District, so that relative values could be taken into consideration.

5.3.5 Effects of the Wainui Bay marine farm.

The mussel spat farm has a low impact on *biophysical* values. Feedback from the TDC reference group, the Golden Bay Landscape Study small groups is that the farm is accepted as part of the Wainui Bay landscape and its effect on *associative* values is low and could have positive connotations.

Effects of the mussel spat farm are largely *perceptual* and include visual effects, night light and noise from boats working the spat lines.

Visual effects are localised, occurring mainly in views looking down into the bay, and are most pronounced in views from the road over Wainui Hill looking down into the bay. This view is valued by residents who live along the road, and a viewing point at the top of the hill is referenced in the Small Group documentation and in the District Plan as a viewing point. However there are limited opportunities from drivers to actually pull over from the road to enjoy the view.

All these effects are reversible.

Participants agreed that the presence of mussel spat farm was influential but was not the deciding factor whether Wainui Bay was an outstanding natural feature or not.

APPENDIX 1: WAINUI BAY LANDSCAPE DESCRIPTION

MAIN ATTRIBUTES	TYPICAL FACTORS TO TAKE INTO ACCOUNT	WAINUI BAY <i>(not exhaustive but representative of the range of information made available at workshop)</i>
Biophysical	Natural <ul style="list-style-type: none"> • Geology, geomorphology, and resultant topography • Hydrology (drainage features and processes) • Soil and vegetation • Ecology 	<p>Key Driver: Geology (Granite). Bay has unique granite and limestone geology and aligns With Abel Tasman National Park landscape i.e. it is geologically distinct from the rest of Golden Bay. Low fertility soils over granite on hill slopes</p> <p>Wide range of landforms in bay: broad ridges and deeply incised streams; alluvial terraces on flats; inner harbour/estuary; sandspits; headlands, outlying rock outcrops,</p> <p>Bay was once entirely forested with 85% of catchment still in (mainly) secondary forest that is relatively well advanced Strong estuarine values (DOC describes as outstanding) with most vegetation sequences lost but the overall pattern is still intact and notable species in ecosystem</p> <p>Mouth of inlet an important feeding ground: Best shag colony in Golden Bay Banded rail, Long finned eels, Reef herons</p> <p>Unique benthic flora and fauna Big brown seaweed Green and blue Mussel spat No Marine weed (almost)</p> <p>Only Golden Sands Bay in Golden Bay Alluvial Terraces, dairy farm Spit (major and minor) 85% still forested (most regen) 200 hectares tall forest, eels 23 SP Estuarine values, seaweed inshore fish Limestone areas – (only in Tasman – Golden Bay) Shag colony, blue penguin, breeding ground in estuary</p>

		<p>Overall: natural values increasing over the last 40 years</p> <p>Wainui Bay is a buffer between residential development at Pohara, Ligar Bay and Tata Bay to the west, and Abel Tasman National Park to the east</p>
	<p>Human ('Cultural')</p> <ul style="list-style-type: none"> • Road networks • Settlements • Land use 	<p>Road into Wainui Bay located on steep hillside with vulnerable, eroding cut faces</p> <p>Small settlement with small number of land titles in bay</p> <p>Alluvial terraces now farmed</p> <p>Built development mainly on flats with a few houses on upper east facing slopes</p>
Perceptual	<ul style="list-style-type: none"> • Legibility (geomorphology) –for instance how vividly the landscape expresses geomorphic processes) • Legibility (way-finding and orientation) –for instance the distinctiveness (memorability) and location of landmarks, distinctiveness of different character areas and their boundaries • Visibility (public and private views) • Picturesqueness (including such aspects as the presence of water, contrast of shadow and light, perspective depth, mix of openness and vegetation) • Coherence (including the intactness of natural vegetation (where relevant), or the extent to which human overlays reflect the underlying natural landform) • Transient values, including presence of wildlife or other values at certain times 	<p>Underlying geomorphic processes vividly reflected in landform, vegetation and water patterns,</p> <p>Memorable landscape, particularly the views coming over the Wainui hill and into the bay.</p> <p>Landmark entry point to Abel Tasman National Park</p> <p>Perceived as a transition and buffer between residential development at Pohara, Ligar Bay and Tata Bay, and Abel Tasman National Park</p> <p>Strongly expressed bay form reinforced by distant Farewell Spit landform that encloses wider Golden Bay landscape</p> <p>Views out to Abel Tasman Point, Farewell Spit, Taupo Point, Abel Tasman National Park</p> <p>Views in to bay and inlet from hill slopes on either sides of the bay</p> <p>Views over bay from Abel Tasman tracks</p> <p>Natural values of darkness and night sky</p> <p>Lack of noise</p> <p>Strong transient values including estuarine changes throughout day/year</p> <p>Bird/breeding/migrating populations</p> <p>Changing light patterns on the water</p>

<p>Associative</p>	<ul style="list-style-type: none"> • Historical associations with the landscape, where relevant to appreciation of the landscape itself • Tangata whenua associations with landscape, where relevant to appreciation of the landscape itself • Recreational uses based fundamentally on landscape qualities • Emblematic aspects (for instance where a feature has been adopted as an icon for a community) 	<p>Strong recreational values: walking, mountain bikes, runners, Gibbs Hill challenge, fishing, kayaking, whitebaiting</p> <p>Local school adopt local artist</p> <p>Local school adopt sandspit to plant and maintain</p> <p>Small, social community</p> <p>Tui community. Tracks and Tides 'Rite of Passage' programmes</p> <p>Important Maori values for all iwi connected to bay: urupa caves, taniwha story, Abel Tasman murders</p> <p>Cultural and historic connections: Abel Tasman first encounter</p> <p>Nationally important spat collection site</p>
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APPENDIX 2: WAINUI BAY MAPS

WAINUI BAY VISUAL CATCHMENT & EXTENT OF COASTAL ENVIRONMENT



Image © 2014 DigitalGlobe
Image © 2014 TerraMetrics
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

KEY

VISUAL CATCHMENT

EXTENT COASTAL ENVIRONMENT

NOTE: map is illustrative only. It should not be considered to be definitive in terms of accuracy of boundary locations

WAINUI BAY NATURAL CHARACTER IN THE COASTAL ENVIRONMENT

OVERALL RATING: HIGH

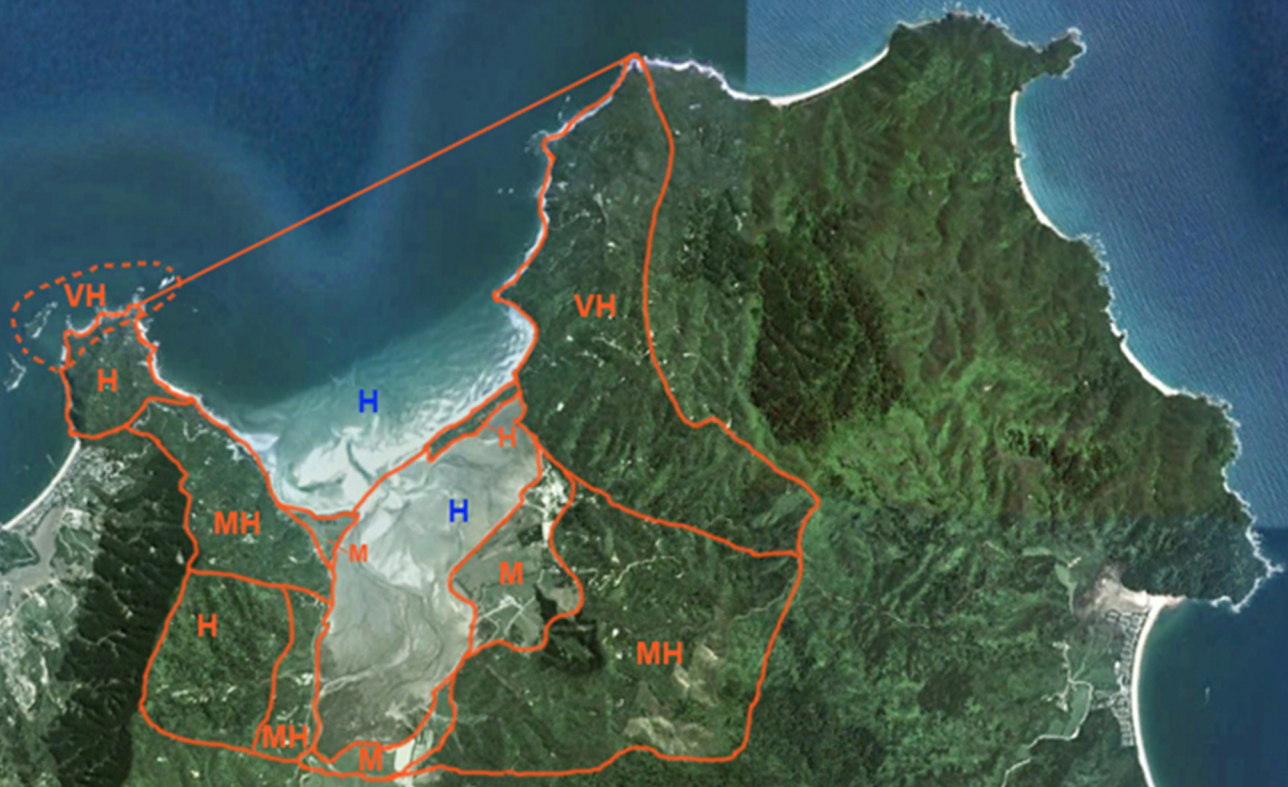


Image © 2014 DigitalGlobe
Image © 2014 TerraMetrics
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

NATURAL CHARACTER RATING SCALE						
TERRESTRIAL						
MARINE						
Very high	High	Moderately high	Moderate	Moderately low	Low	Very low

NOTE: map is illustrative only. It should not be considered to be definitive in terms of accuracy of boundary locations.

WAINUI BAY OUTSTANDING NATURAL FEATURE ASSESSMENT

ABEL TASMAN PARK
OUTSTANDING NATURAL
LANDSCAPE

LANDSCAPE CHARACTER

- BIOPHYSICAL VALUES: HIGH
- PERCEPTUAL VALUES: HIGH
- ASSOCIATIVE VALUES: VERY HIGH

OVERALL RATING: VERY HIGH - OUTSTANDING

NOTE: map is illustrative only. It should not be considered to be definitive in terms of accuracy of boundary locations