

A scenic mountain landscape. In the background, a large, rugged mountain peak is covered in snow under a clear blue sky. The middle ground shows a valley with green grass and a small wooden cabin with a dark roof. To the left of the cabin, a stone chimney stands on a rocky outcrop. The foreground is filled with lush green grass and shrubs.

# Land

AND HOW WHAT WE DO AFFECTS IT

Breathtaking.....



## Complex & Diverse



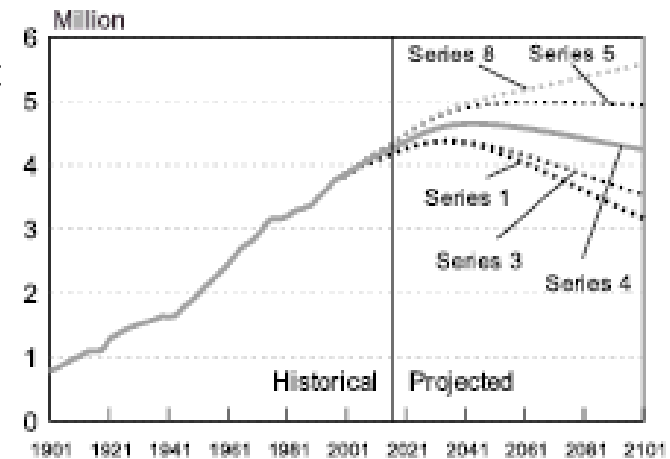
However, our land is changing every day, often with the loss of some of our truly natural environments (e.g wetlands and forests).

# Population



Figure 1

New Zealand Population 1901-2101



Between 3 and 5.5 million people by 2101 & 800 new cars per week in Auckland!

# Land has a context

Someone lives on the land and for them it has a value.



# AEE Steps

- ▶ Step 1: Identify the activities for which a resource consent is sought
- ▶ **Step 2: Conduct a Site Inspection**
- ▶ Step 3: Talk to staff at the Council (establish rules)
- ▶ Step 4: Identify the environmental effects- how do changes affect landforms?
- ▶ Step 5: How do I rank the effects?
- ▶ Step 6: Pre-application meeting (Complex)
- ▶ Step 7: Re-evaluate your proposal
- ▶ Step 8: Finalise the AEE

# Site Visits



A site inspection to view the landforms.

Anything of community interest at a particular site?

# Developments that may affect land



World Building of the Year, 2012,  
Singapore



Chrysler building, NY



Bangalore, India



# Coastal Infrastructure

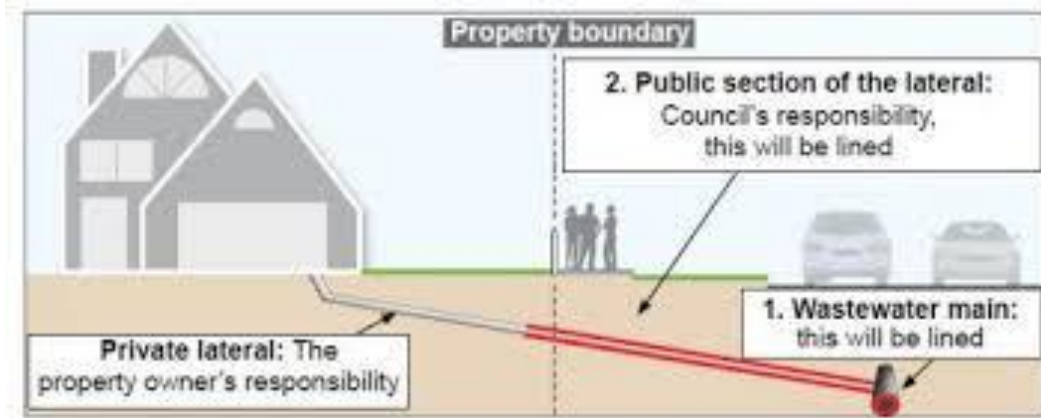
NZ land area approx. 270 000 km<sup>2</sup>  
with coastline approx. 15 000 km



Country	Coastline: area ratio	Country	Coastline: area ratio
Gibraltar	0.5	Spain	100
Denmark	6	France	132
Greece	10	Germany	155
Japan	12		
Norway	13	USA	330
New Zealand	18	World	420
Kuwait	35	Russia	450

# Water Infrastructure

Large changes to subterranean structures, such as new wastewater mains, can affect land especially during building and maintenance.



# Agriculture/Farming



# Power Infrastructure

Windfarms can have a negative or positive effect on the visual quality of the land but this view is subjective.



# Mining

Often the effects are hidden but aerial photos demonstrate how the land is affected.



# Landscape Architects

Landscape architects control landscape assessments.

These are a very recent type of assessment which are very specialized and require a need to engage and understand the architects as this can be greatly influential in obtaining a consent.



# Promoting Sustainable Mmgt

Sections most likely to be most relevant to a LSA are:

- ▶ Section 5 Purpose and principles of the RMA
- ▶ Section 6 (a) Preservation of the natural character of the coastal environment ... wetlands, lakes, rivers and their margins, and the protection of them from inappropriate subdivision, use and development
- ▶ Section 6(b) Protection of outstanding natural features and landscapes from inappropriate subdivision, use and development
- ▶ Section 7(c) Maintenance and enhancement of amenity values
- ▶ Section 7 (f) Maintenance and enhancement of the quality of the environment

# Landscape Assessment

Matters to be considered in the RMA:

As a general guide, matters to be considered when deciding an application for resource consent or a NoR are set out in RMA s104 and s171 respectively, and those relevant to an LSA include:

- ▶ Landscape and visual effects of the proposal;
- ▶ Policy statement and plan provisions relating to landscape and visual issues;
- ▶ Alternative locations or methods ; and
- ▶ Other relevant matters (e.g. non-statutory documents such as existing district-wide landscape assessment reports)

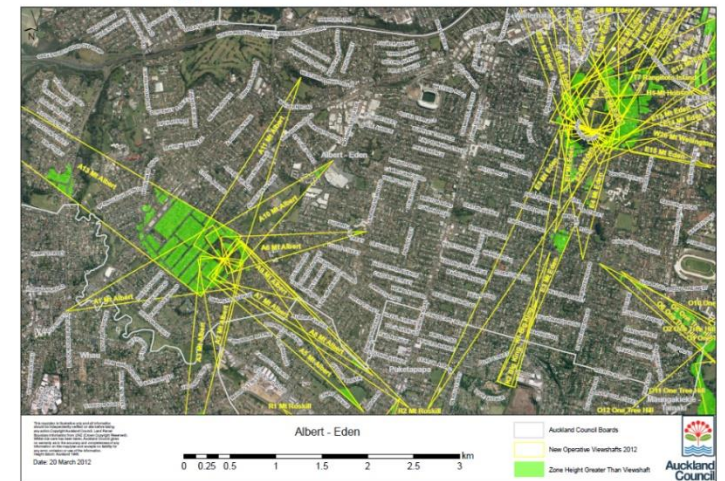


# Valued Landscapes

Factors that can help in identifying valued landscapes include:

- ▶ Presence/absence of statutory & local landscape designations;
- ▶ Landscape quality/condition;
- ▶ Scenic quality (designated height sensitive areas help to prevent blocking of views such at the volcanic cones of Auckland)
- ▶ Rarity of particular elements/features;
- ▶ Representiveness;
- ▶ Conservation interest;
- ▶ Recreation value;
- ▶ Cultural / iwi.

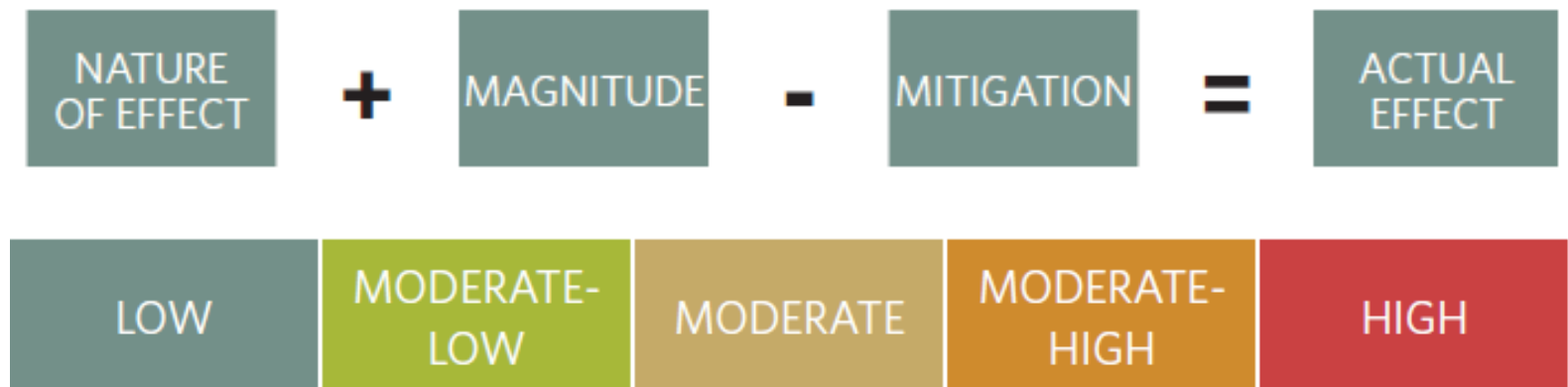
## Height Sensitive Areas



# Nature of the Effect

i.e. its magnitude is determined by considering four separate factors, namely:

- ▶ Size/scale;
- ▶ Geographical extent;
- ▶ Duration;
- ▶ Reversibility



# LSA Format

- ▶ Executive Summary Description of Proposal
- ▶ Relevant Statutory and Non-Statutory Provisions
- ▶ Existing Landscape
- ▶ Alternatives
- ▶ Landscape and Visual Effects
- ▶ Design and Mitigation Measures

Such a structure addresses the matters that need to be included in an AEE as listed in RMA Schedule 4(1).

# Types of consent -Subdivision Consent

For subdivision activities, including:

- ▶ Creation of a new freehold title
- ▶ Creation of a cross-lease
- ▶ Creation of a unit title development, for example a block of flats
- ▶ Adjustment to a boundary.



# Conditions & Requirements

- ▶ A subdivision consent will normally have a number of conditions which may require building consent and engineering approvals.
- ▶ As well as fulfilling these other requirements, you will need to engage a licensed cadastral surveyor to prepare the necessary scheme/survey plan.



# Land-Use Consents

- ▶ Any activity done on the land, e.g. retail, horticulture, vegetation removal building, additions and alterations to buildings, and controls on buildings and structures.
- ▶ Land modification such as earthworks.
- ▶ The use of land also includes development on, under or over the beds of streams, rivers and lakes. This includes, for instance: constructing, using, or demolishing any structure such as a bridge or jetty.
- ▶ Depositing any material or disturbing the river, stream or lake bed introducing any plant into a body of water.

## Other Info

Normally a land use consent is granted for **unlimited duration**, as long as the development detailed in the consent has been implemented to a significant level within five years (or a different period as written in the consent). If not, your consent will lapse.

Any land use consent that is granted is attached to the property (as opposed to a specific person).



# Tree Consent

If a tree on your property is protected, you will need a resource consent to remove it, prune it, or carry out construction work near it (Auckland Council, n.d)

You may need to check any rules around trees on a property before you start work for which you can follow this link for more information, see [trees - check before you chop.](#)





# Contaminated Sites

RMA purpose (Section 5 ) is to promote “sustainable management of resources” For activities on contaminated land this includes:

- ▶ Safeguarding the life-supporting capacity of air, water, soil, and ecosystems.
- ▶ Avoiding, remedying, or mitigating any adverse effects of activities on the environment.



# Contaminated Land

Assess the nature of the discharge and sensitivity of the receiving environment to adverse effects.

The National Environmental Standards (NES) for contaminated land can be accessed using this link - [here](#)



## Controlled, Restricted or Discretionary?

If permitted activity criteria not met as defined by the NES regulations or Regional Plan Rules

- ▶ AEE will cover contaminant control and discharge etc.
- ▶ PSI (preliminary site investigation), DSI (detailed site investigation) reports will also accompany consent.

For more info on contaminated land assessments - follow this [link](#).



## Case Study 1 – Pūhoi to Wellsford Upgrade

The Ara Tūhono Pūhoi to Wellsford Road of National significance – a high quality motorway alternative to the existing State Highway 1 to connect Auckland to Whangarei

Objectives include improving capacity, reducing travel times, improving safety and alleviating congestion etc.

Timeframe for construction approx. 6 years



The Pūhoi to Warkworth project will extend the four-lane Northern Motorway (SH1) 18.5km from the Johnstone's Hill tunnels to just north of Warkworth

## Potential Effects (as they relate to RMA)

- ▶ Effects on the natural character of wetlands and rivers and their margins
- ▶ Effects on outstanding natural features and landscapes
- ▶ Effects on visual amenity values
- ▶ Effects on the quality of the environment (biophysical aspects of the landscape)
- ▶ Landscape effects during construction.



## How is land affected?

- ▶ Avoids most sensitive landscapes to protect outstanding natural landscapes
- ▶ Changes to landscape character areas (e.g Pūhoi river and estuary) but with limited adverse effects due to use of bridges and viaducts.
- ▶ Most extensive earthworks restricted to exotic forests
- ▶ Main visual effects from large scale earthworks most noticeable from certain residential areas but are short term (construction only).

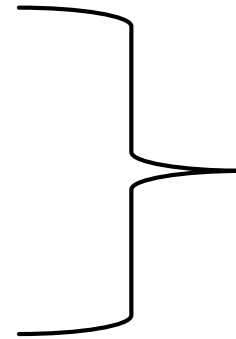


The first stage of the Ara Tūhono – Pūhoi to Wellsford Road of National Significance

# Effects

The Landscape and Visual Assessment Report has considered the effects of the Project on three interrelated components:

- ▶ Biophysical
- ▶ Visual amenity
- ▶ Landscape/natural character



For each region  
e.g Hungry  
Creek, Perry  
Road

Plus construction effects due to earthworks, veg removal, noise, dust, etc.

Route selection avoided the most sensitive landscapes but some effects on the landscape and local populations are unavoidable.

# Nature of Effects

## ► Landscape and Visual

Effect	Significance	Positive effects	Adverse effects	Potential for mitigation	Duration	Scale
Landscape character areas	Moderate or medium term	None	Moderate or medium term	Moderate or medium term	High/long term/regional	Minor/short term/local
Large scale earthworks	Moderate or medium term	None	Moderate or medium term	Moderate or medium term	High/long term/regional	Minor/short term/local

Where **Moderate** in this case means “readily mitigated, contained in locality” and **High** means “not always able to be mitigated, effects extend beyond locality and can be enduring”



# Mitigation

New road planned to “co-exist comfortably with the natural elements, rural production and patterns of settlement” via:

- ▶ Construction of cut slopes/fill embankments to provide more natural integration with landscape
- ▶ Cut slopes – grassing, revegetation or naturally exposed rock face;
- ▶ Revegetation of fill embankments
- ▶ Contouring of spoil disposal sites and integration with adjoining landforms

## Other mitigation

- ▶ Well-designed bridges and viaducts to reduce the physical and visual effects
- ▶ Retention of existing vegetation and extensive planting to provide screening and visual integration
- ▶ Extensive planting based on established vegetation patterns along the alignment to integrate the highway and screen it from the residential settlement areas, including early permanent planting to proactively mitigate visual effects.