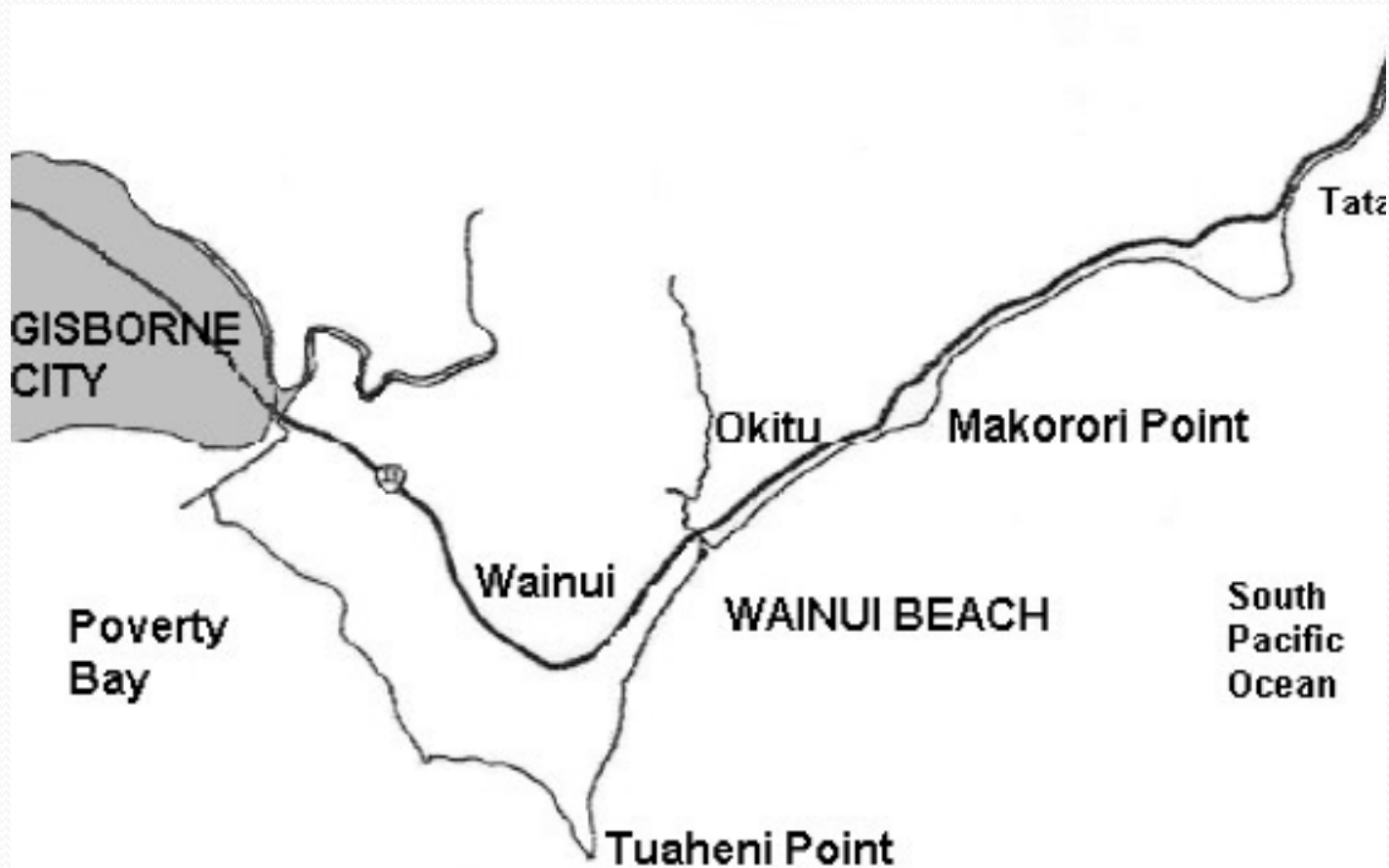




Location



Wainui Beach – Tairāwhiti

East Coast north of Gisborne city

May 2012



Wainui Beach Coast Care Group

Photo: Gray Clapham 2010



Middle section of Wainui Beach

Photo: Gray Clapham 2008/09



Wainui 'erosion' = storm generated cut & fill

Sand moves to offshore bars & back again



Wainui Coast Care Group Purposes

- **Restore & protect dunes eco-systems**
- **Educate and raise awareness**

Key actions, 2008 to 2014

Education

Ten Year Plan

Planting & 'fences'

Calibrated signage & photo records

Community collaborations

Wainui Beach Management Strategy updated

NZ Dunes Restoration Trust

Education

Laws of the Coast

Wainui Beach

Dunes Restoration

Five Laws of the Coast

Dr Amber Dunn

1 There are no parts, only WHOLES

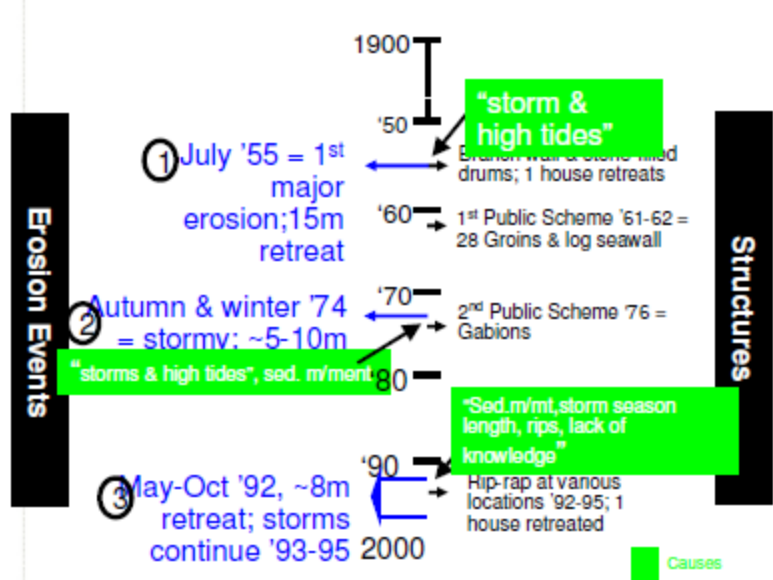
2 The nature of SAND is to MOVE

3 MOVING SAND = natural PROTECTION

4 Dunes are STORE of sand for the beach

5 History of coast is of STORMS and RECOVERY

Erosion events vs 18.6 yr astronomic tidal cycle



Approx
peak of
cycle

Feb 1956

Sept 1974

April 1993



Wainui Coast Care

Ten Year Plan

Gisborne District Council Ten Year Plan

2012/22

Wainui Coast Care Group Plan, 2011/21

Aims

To achieve dunes stabilisation and accretion along the length of the beach

To address stream mouth and storm water erosion

Approach

Holistic and collaborative

Beach divided into kaitiaki strips

Progressively extending each year north and south from the Hamanatua Stream, to at least Schools Access

Work Plan

Planting

Native sand binding grasses on front dunes

Native flaxes and shrubs on back dunes

Protection & education

Minimising damage to the plants by human traffic with

- Fencing and flax barriers
- Improved access 'channels'
- Signage , brochures , education.

Introduce Sand scraping

Create more front dunes by taking sand up to where is little/none, then plant, protect, weed.

Getting stuck in....



Successful pilot plantings

South of Hamanatua Stream

Steep Lysnar Reserve Dunes Face

Looking south from Hamanatua stream

Photo: Gray Clapham 2010



2010/11

School & Group planting with Wayne O'Keefe



South of Hamanatua stream

→ Two + years later 2012/13



Four+ years later, Mar 2015



Spinifex and pingao + urea + signage
= progress in restoring natural shape of dune



Calibrated Signage

Tony Ogle & John Logan

Every 200 metres

2 metres out from
pre-existing plants

1 metre above
existing sand level



January 2012
after 14 months



February 2013
after 27 months

(By Oct 2013 sign almost hidden)



Spinifex 'garden'

Loves urea,
applied 2 x a year

Abundant flower
seed heads

Planted 2010/11
Photo Feb 2013



Successful steep dunes faces

Lysnar Reserve
damaged dunes faces

First steep-face planting, Sept 2011



Wainui Lysnar reserve – vulnerable toe of dunes

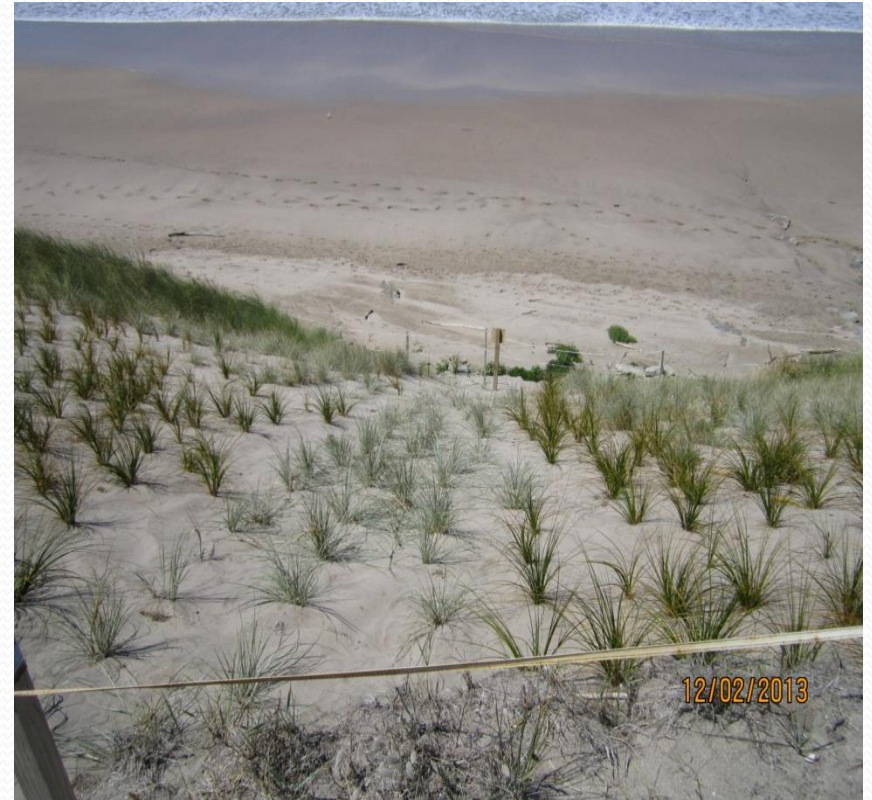
Photo: Gray Clapham 2010



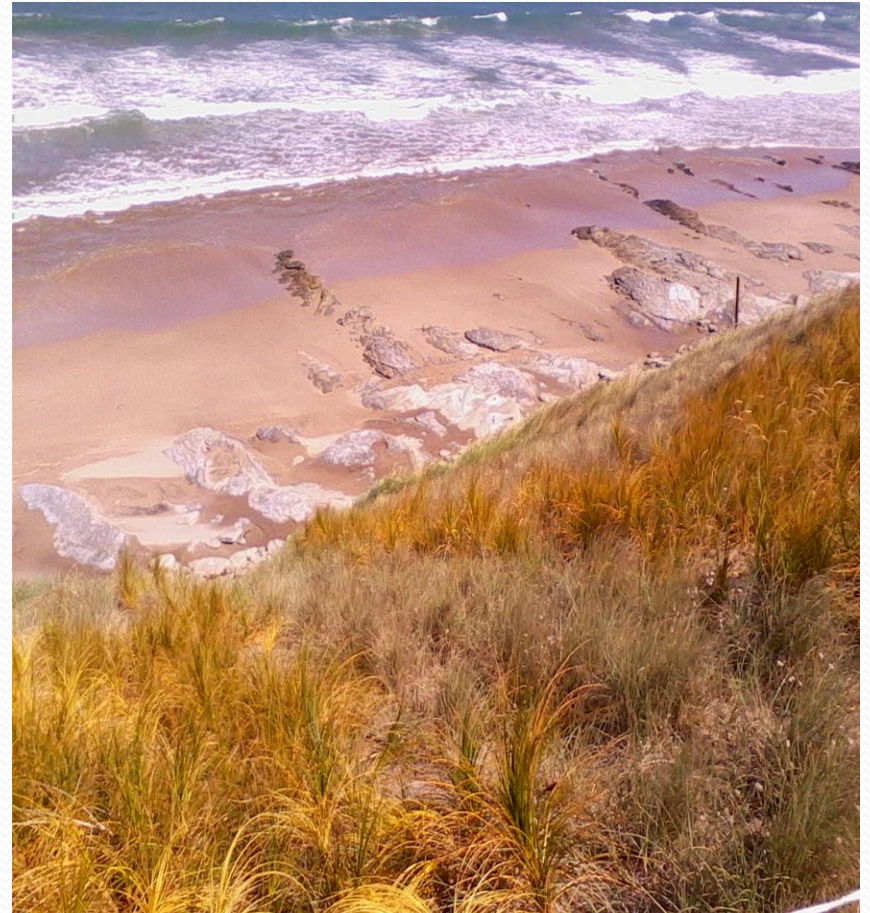
Spinifex & pingao planting

August 2011

February 2013



2014 (+3yrs)



2014



2015



Signage – Peggy Ericson

Tape & bamboo 'fence' - DoC



Storm water protection

Schools Access plantings,

> address new subdivision effects

Pines car park run off

> address drainage issues

Planting new storm water control after a subdivision increased runoff onto beach



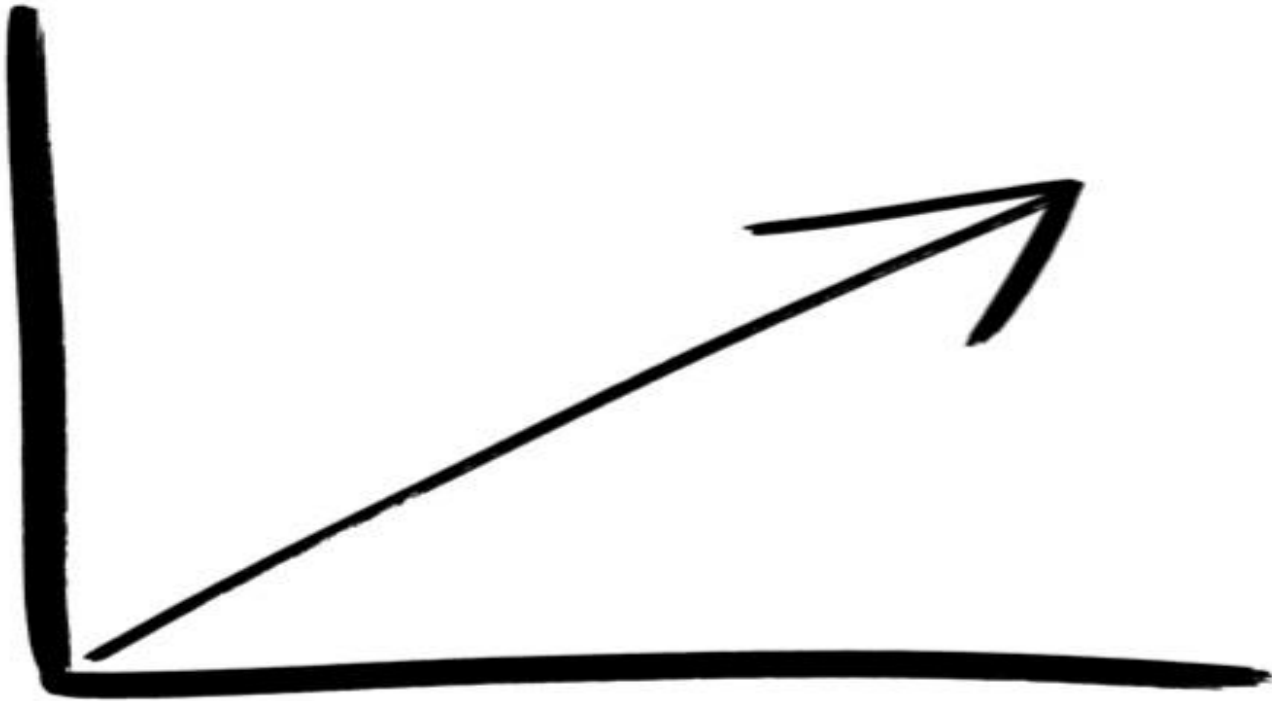
Pines car park storm water damage



Achievements 2009/15

- New Wainui Beach Management Strategy dunes restoration prominent
- Ten Year Plan implemented
- Community collaborations increasing
- Spinifex, pingao 6,500+ planted
- Ecosystem protection increasing
- Learnt heaps

Where to from here?



Implementing Wainui Beach Management Strategy

Increased dunes restoration

Sand scraping & planting up banks

Addressing

Stream mouth storm water effects

Human foot traffic on dunes faces

Fencing (lack of) quality & aesthetics

Increasing Wainui School involvement

Sand scraping & planting further up banks....





Deter use of quick tracks to beach,
reinstate steps, improve 'fencing'



Keeping people off bare faces (including local clubs...)



Help nature to gain as much dunes
as possible before

.... the next extreme cycle of storm
cut erosion every approx 18.6yrs
(2026/30)

...and climate change sea level rises
take effect - unless people and
politicians act.....



***With thanks to Gray Clapham, Wainui Coast Care Group
& Wainui School (for photos), Dr Amber Dunn (for slide)***



Gisborne District Council

(plants, fertiliser, fencing, support to attend this Hui)

Department of Conservation (spades, fencing, people)

Dunes Trust (expertise, resources, inspiration)

