

Dune Restoration Trust of New Zealand

National Conference, 2013

Nelson – A Region of Coastal Diversity

Conference Presentation: Pest Plants in the Coastal Environment of the Nelson/ Tasman Region

The following presentation was given by Bradley Myer , Kaitiaki o Ngahere Ecological Restoration & Biosecurity. The Dunes Trust has been given permission to make this document publically available from our website. However the information and images contained in the document belong to the presenter and presenter's organisation.

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Pest Plants in the Coastal Environment of the Nelson/ Tasman Region

Bradley Myer



Presentation Overview



Kokorua Estuary



Image © 2013 DigitalGlobe

Google earth

Kokorua Alluvial Forest Fragment



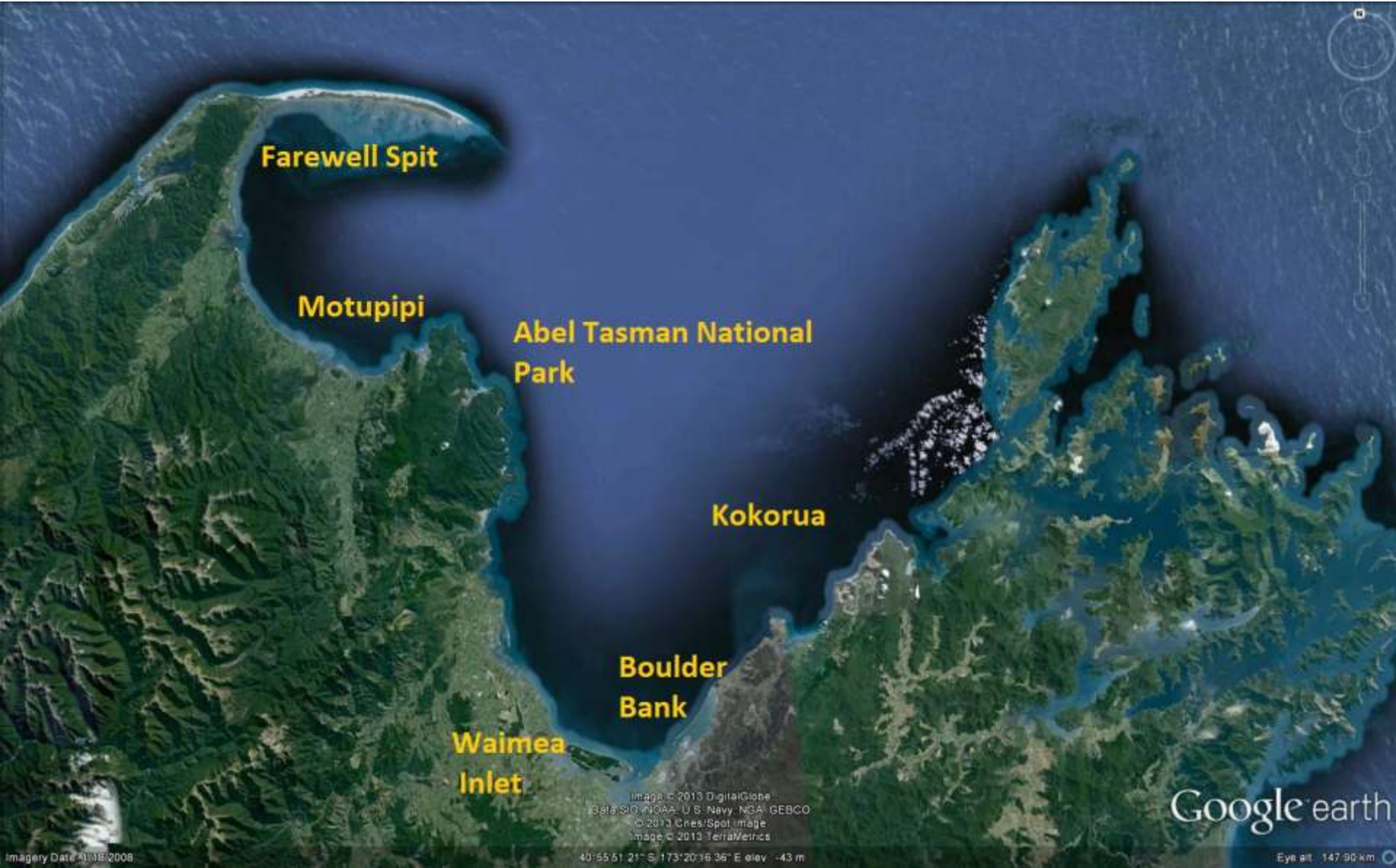
Clematis vitalba – Old man's beard



Tradescantia, Sellanginella, Mt Bretia



Boulder Bank



Boulder Bank: Nelson City

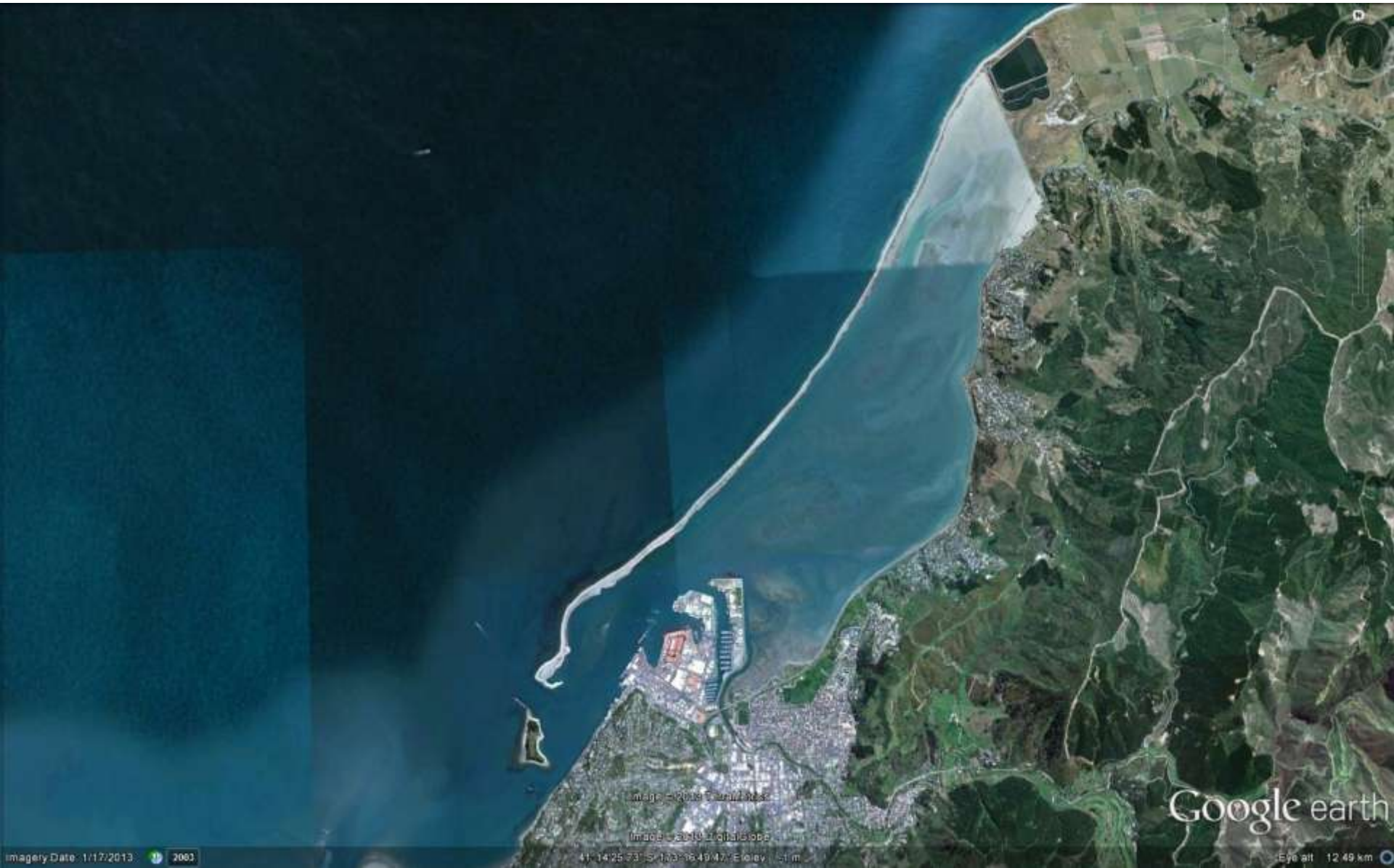


Image © 2013 Earthstar

Image © 2010 DigitalGlobe

41° 14' 25.73" S 173° 16' 49.47" E Elev: 51 m

Google earth

Boulder Bank: Managed by DOC

Pest Plant Management:

- Approximately 320 hours p.a
- Weed control since 1987 or thereabouts
- Different methodologies for each species
- Different times of the year for each species
- Nesting birds an issue



Boulder Bank: Nelson City

Problem Species:

- Old mans beard
- Asphodel
- Boxthorn
- Pines
- Oxalis
- Gorse
- Smilax
- Iceplant
- Broom
- Pohutakawa
- Blackberry
- Boneseed



Asphodel Control on the Boulder Bank



Asphodel on the Boulder Bank



Waimea Inlet



Imagery © 2013 DigitalGlobe
© 2013 SIO, NOAA, U.S. Navy, NGA, GEBCO
© 2013 Cnes/Spot Image
Image © 2013 TerraMetrics
40°55'51.21" S, 173°20'36.36" E elev: -43 m

Google earth

Eye alt: 147.90 km

Imagery Date: 11/18/2008

Saxton Island



Google earth

Saxton Island

- Privately owned by Saxton Family since 1850's
- Target: *Wilsonia backhouseii*
- Australian species
- Only known site in New Zealand
- Introduction a subject of debate
- Sewer line

Distribution of *Wilsonia backhouseii*



Wilsonia Backhauseii: Saxton Island



***Wilsonia Backhauseii*: Saxton Island**

- Has been actively managed since 2010
- Control objective of eradication
- Found only between the 3.8m high tide mark and the 3.3m
- Has extensive woody rhizome down to 150mm
- Spraying with Grazon and Roundup Transorb mix
- No water source on the Island
- Slowly decreasing in extent

Waimea Inlet Spartina Programme



Image © 2013 TerraMetrics

Image © 2013 DigitalGlobe

Spartina angelica



Waimea Inlet Spartina Programme

- Introduced in the Waimea Inlet in 1930 to “increase saltmarsh productivity” and reclamation.
- Multiple successive plantings between 1930 and 1956.
- A survey in 1975 concluded that Spartina was occupying a total of 16.6 ha in the Waimea Inlet and was estimated to occupy 45 ha by 1987.
- An eradication programme commenced in the 1970s.
- Today there is approximately 20m² in total and control of these sites uses 7ltrs of mixed Gallant.
- *Franko et al 1985 and Shaw*

Waimea Inlet Spartina Programme: Recent aerial survey



Abel Tasman National Park



Abel Tasman National Park

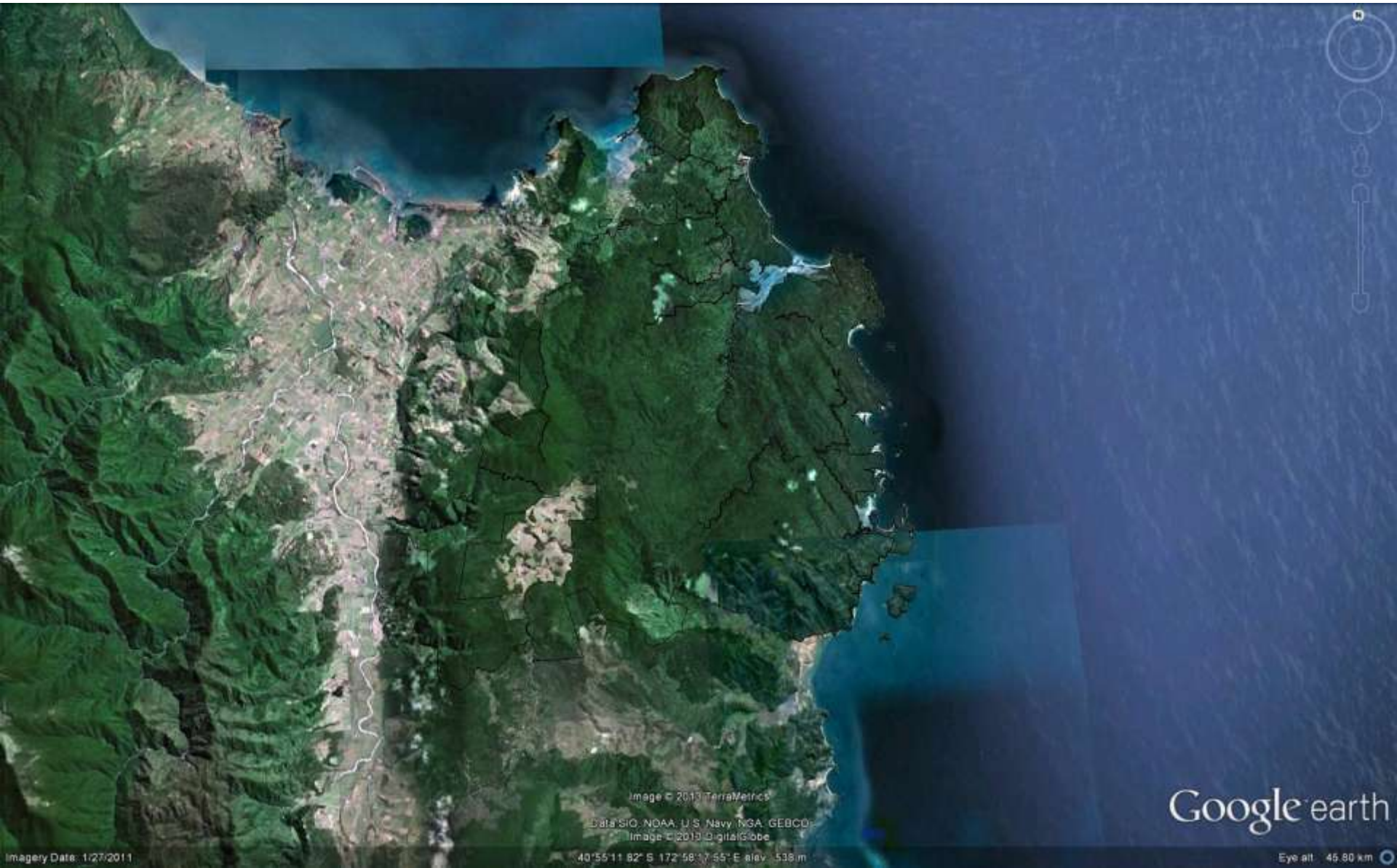


Image © 2013 TerraMetrics

Data: SIO, NOAA, U.S. Navy, NGA, GEBCO
Image © 2013 DigitalGlobe

40°55'11.82" S 172°58'17.55" E elev. 538 m

Google earth

Eye alt. 45.80 km

Imagery Date: 1/27/2011

Falls River Mouth



Google earth

Abel Tasman National Park

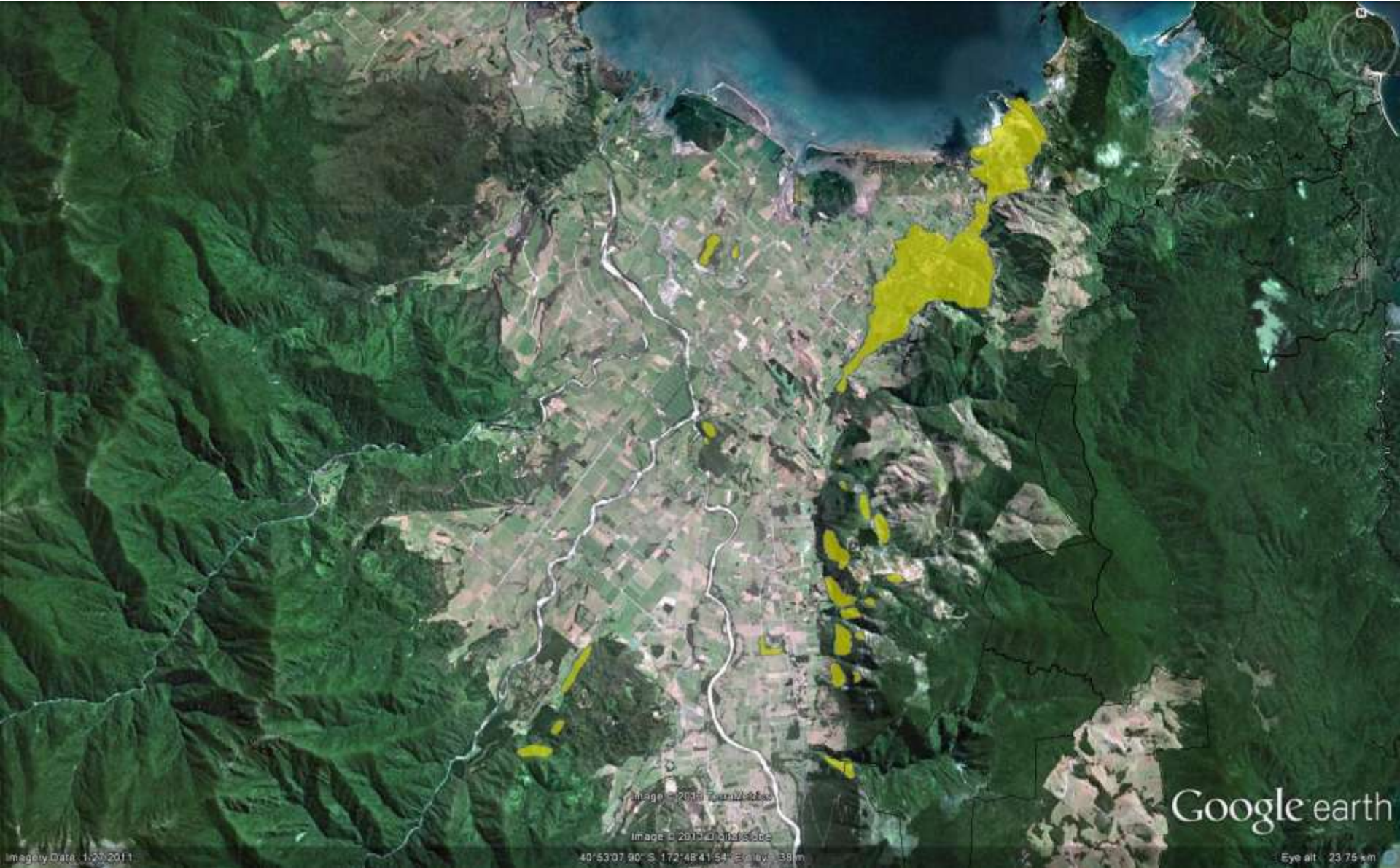


- Project Janszoon – A privately funded 30 year ecological restoration project for 20 000ha of the ATNP
- Tonga Island Marine Reserve off shore
- Weedy interface between the 2 protected and managed areas - Marram Gorse and Iceplant

Jasminium humile



Jasminum humile - Distribution in Golden Bay



Jasminum humile



Jasminium humile at Motupipi



Farewell Spit



Image © 2013 DigitalGlobe
Baird/SIO/NOAA, U.S. Navy, NGA, GEBCO
© 2013 Ches/Spot Image
Image © 2013 TerraMetrics
40°55'51.21" S, 173°20'36.36" E elev: -43 m

Google earth

Eye alt: 147.90 km

Imagery Date: 11/18/2008

Farewell Spit



Image © 2013 TerraMetrics
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Image © 2013 DigitalGlobe

Google earth

Farewell Spit

- Shorebird Network Site (11,388 ha) Nature Reserve managed by Department of Conservation
- Established as a Ramsar site on 13/08/76
- UNESCO World Heritage site
- A 30km long sand spit, and intertidal area, extending at a rate of 15m annually.
- The first 2.5 km is open to the public only.
- Joining eco tours is the only way to get to the tip of the Spit, and to visit the lighthouse and the gannet colony.

Farewell Spit – Weed Issues

- Has been burned several times
- Has been grazed
- Dynamic and difficult place to practice weed management
- Marram over the entire area
- Gorse, Spanish heath, climbing asparagus, climbing dock, pampas, pines, hawthorne, barberry, briar rose, smilax
- Buffalo grass, Tradescantia, periwinkle and arum lilly at the lighthouse

Farewell Spit - Weeds



Farewell Spit - Marram



The End

Thanks to staff from DOC, Cawthron and TDC

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Nelson/ Tasman Region**

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