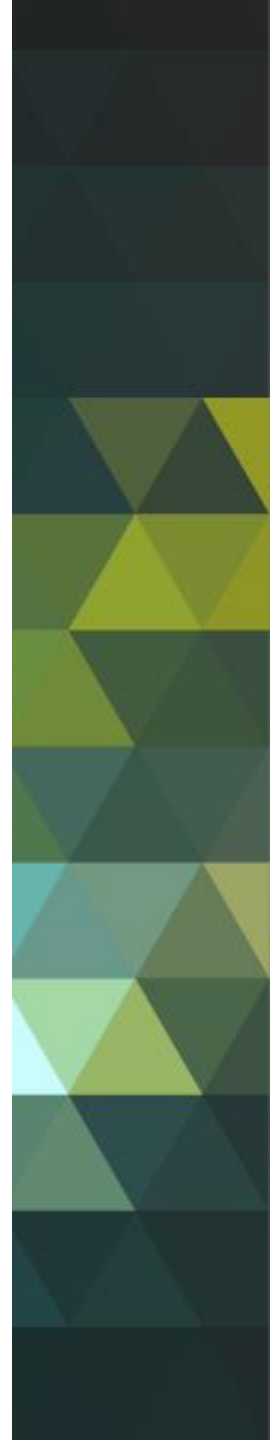


# Wild about Christmas trees?



**LANDCARE RESEARCH**  
**MANAAKI WENUA**

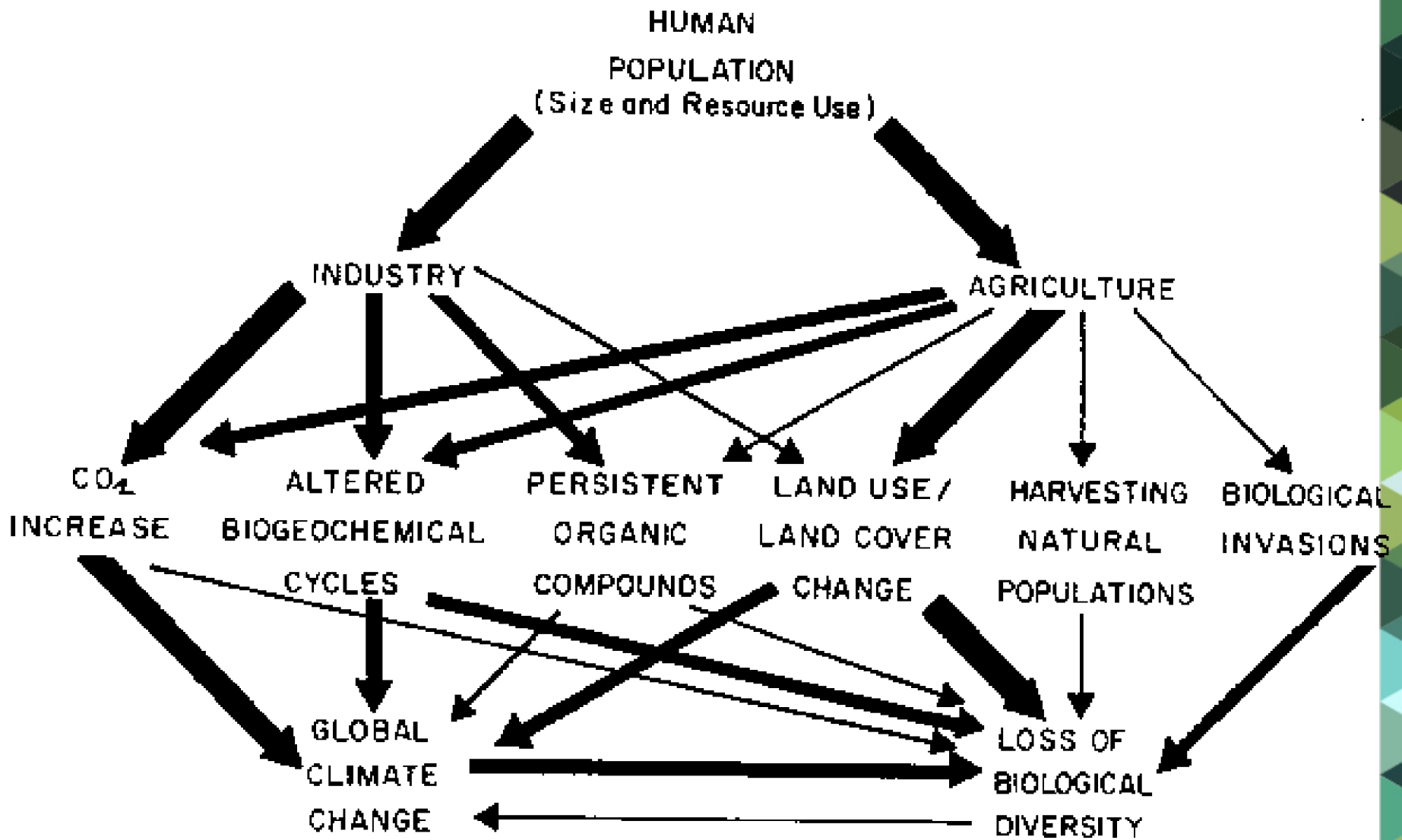


# Christmas trees

- Fresh 'n' Bushy sells a couple of thousand fresh trees a year in the Wellington region
- Meanwhile, the Christmas Heirloom Company imports two 12-metre shipping containers full of artificial trees every year and they sell out
- A live Christmas tree ranges from \$8 -\$80
- Theoretically every person in NZ could have 4 wilding conifers a year for 60 years

# What's under the tree?

1. Approaches for thinking through cultural values appropriate for people engaged with environmental issues.
2. Suggestions for how to work with specific cultural values and sites of cultural, for people managing wilding conifers.
3. A contribution to ongoing conversations about what we as New Zealanders value and how we might navigate the range of values shaping New Zealand as we head into 2016.



INTRODUCED SPECIES: A SIGNIFICANT COMPONENT OF HUMAN-CAUSED GLOBAL CHANGE

# Cultural values

Cultural values of ecosystem services are the collective norms and expectations that influence how ecosystems accrue meaning and significance to people.

(Church et al. 2014, p. 16).



# Wilding conifers







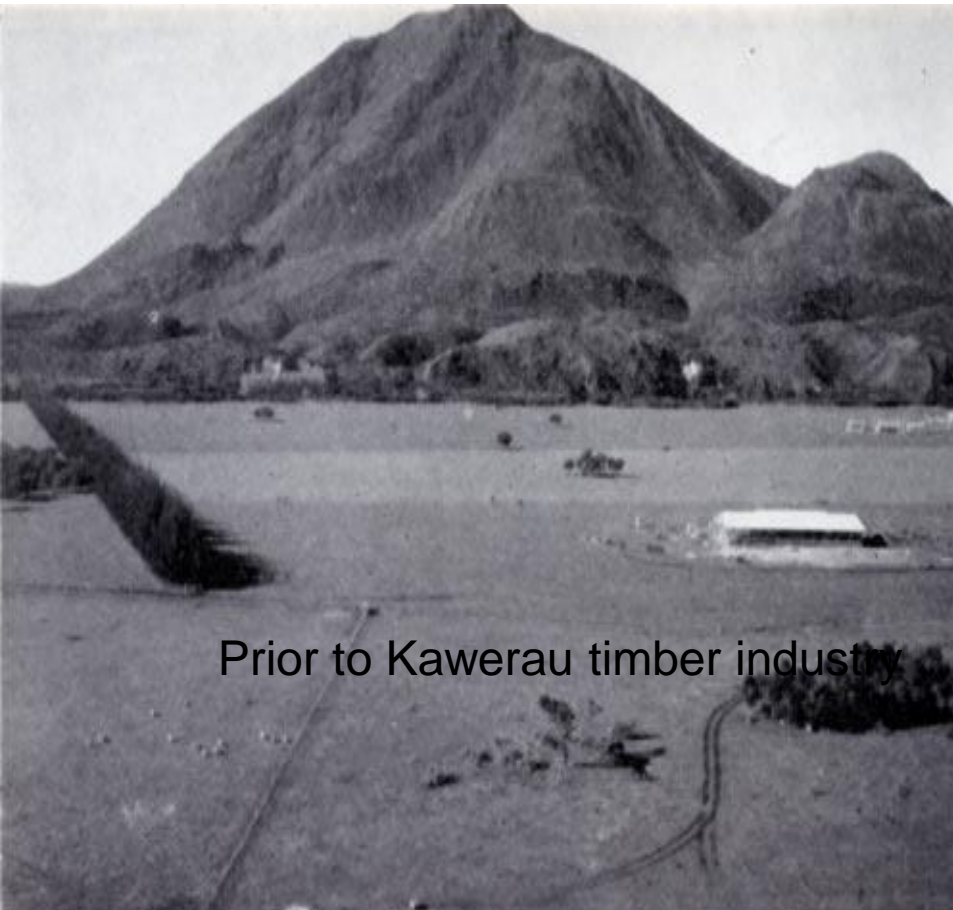


# Queenstown

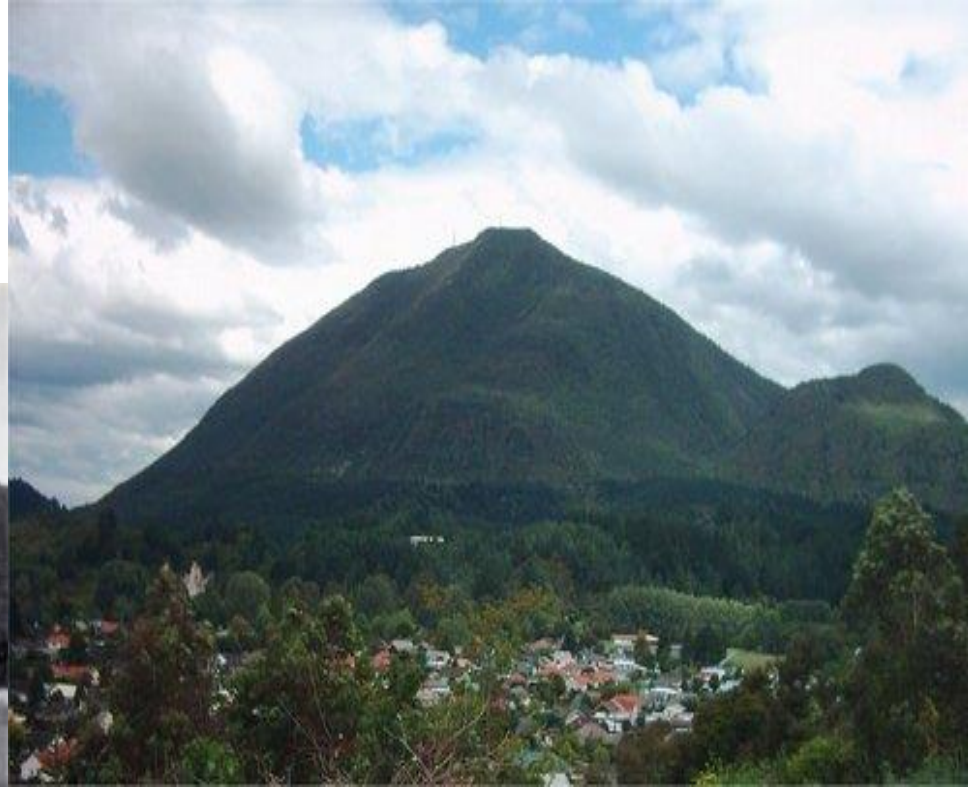




# Mt Putauaki



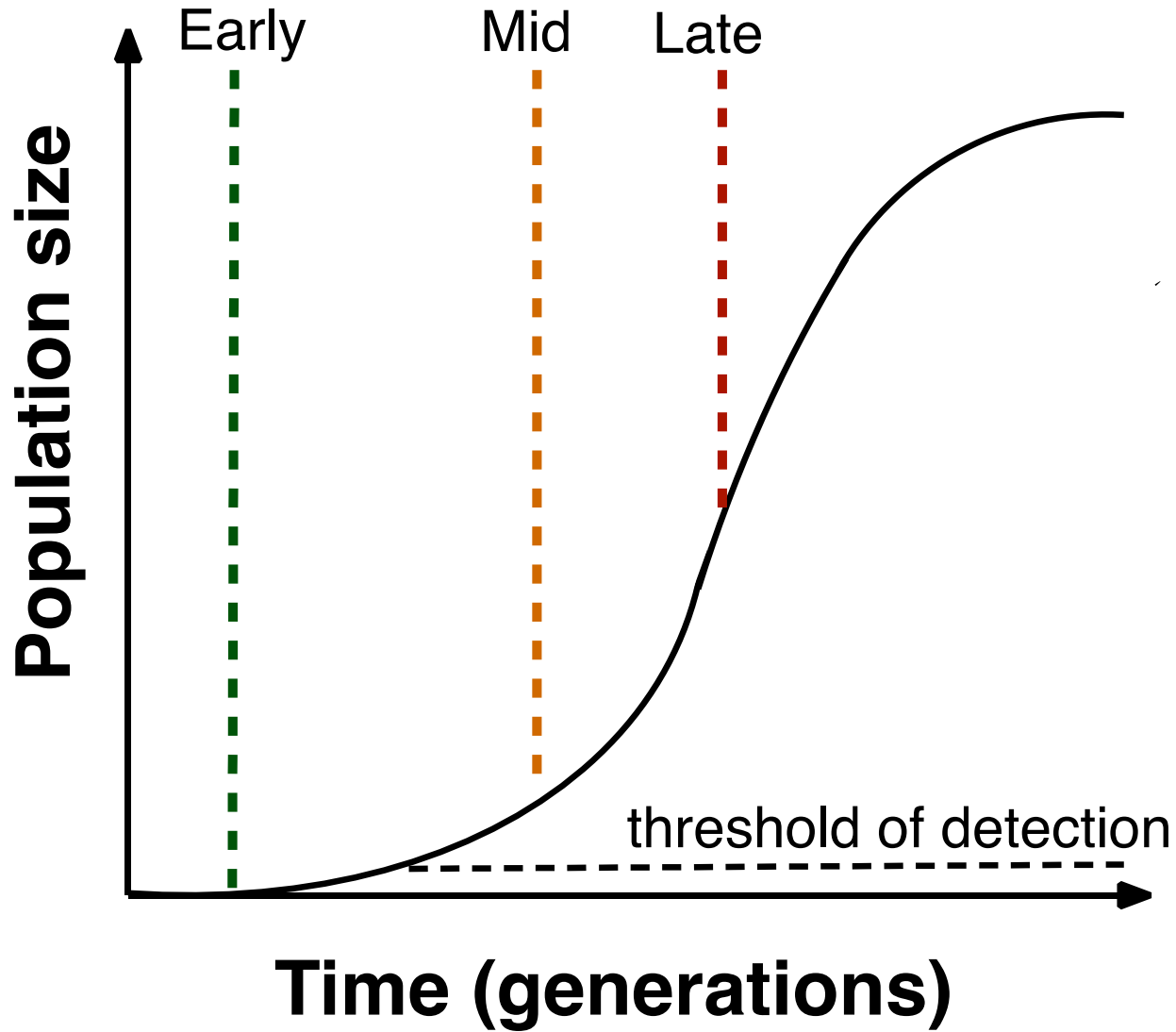
Prior to Kawerau timber industry



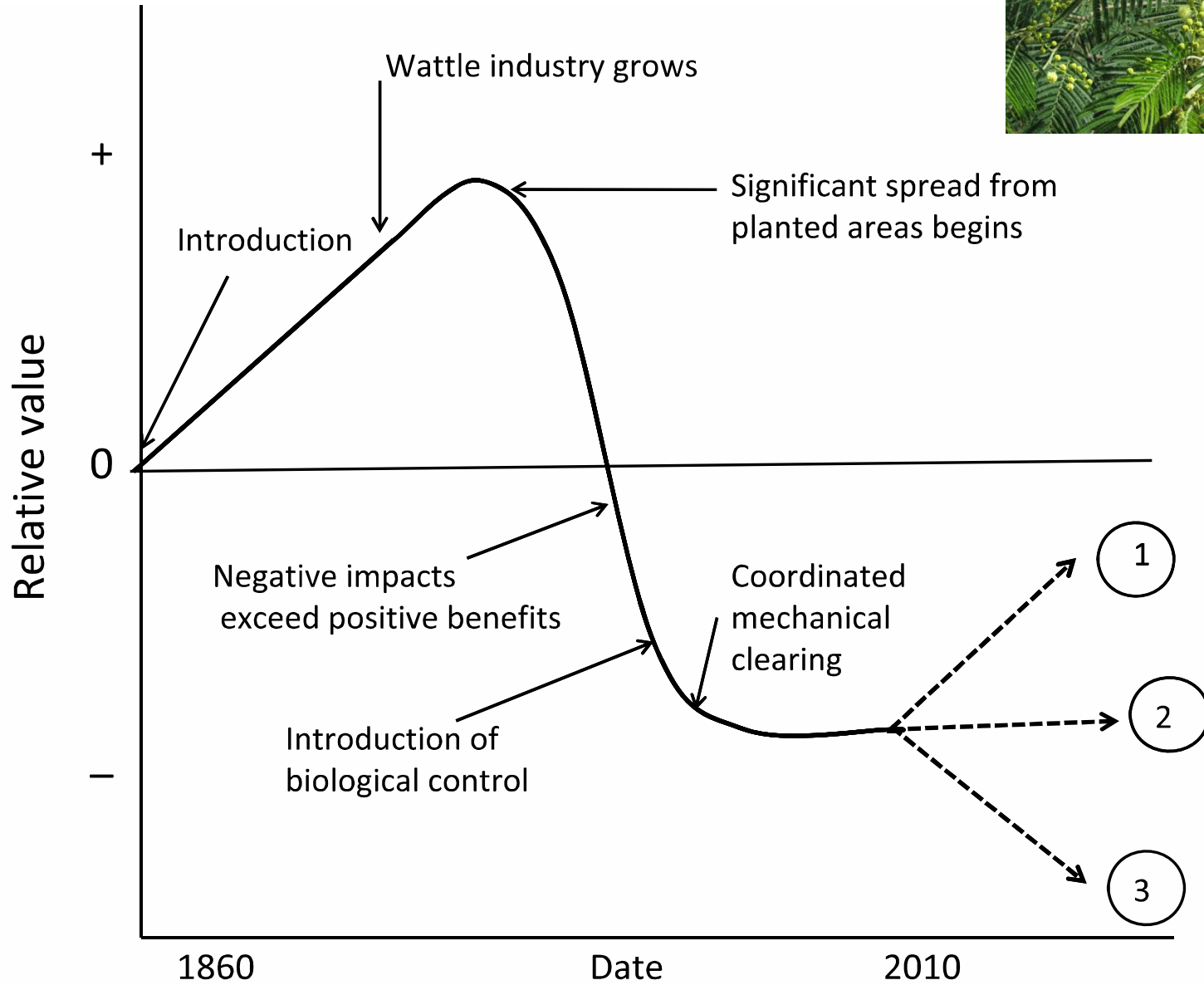
# Pukaki today



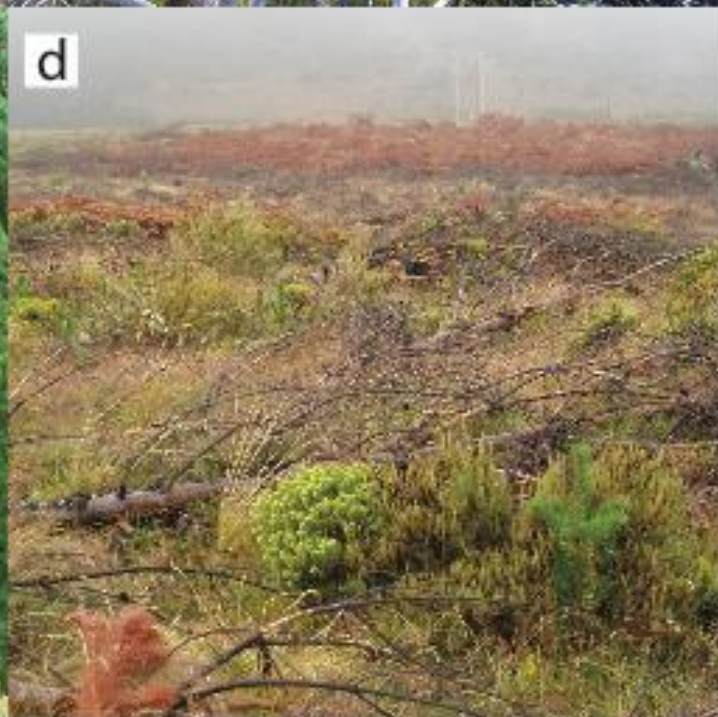
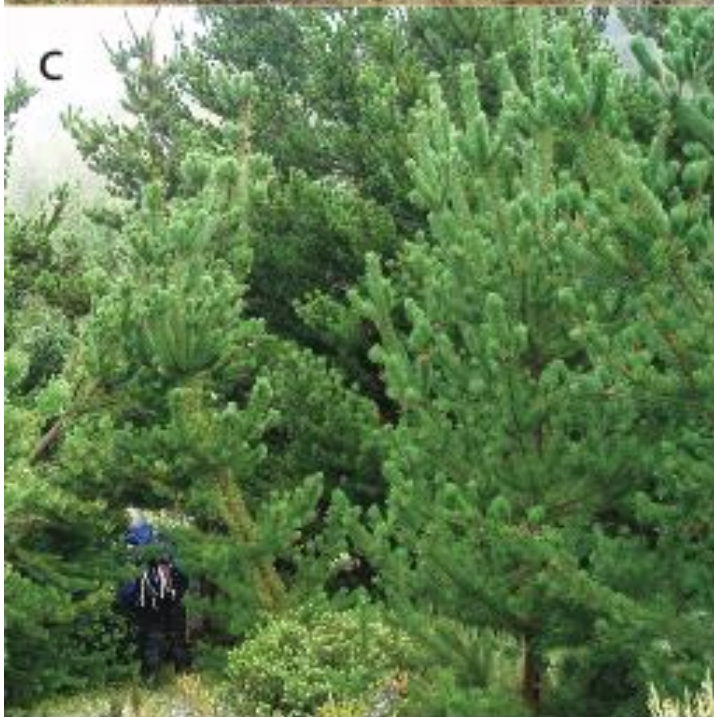
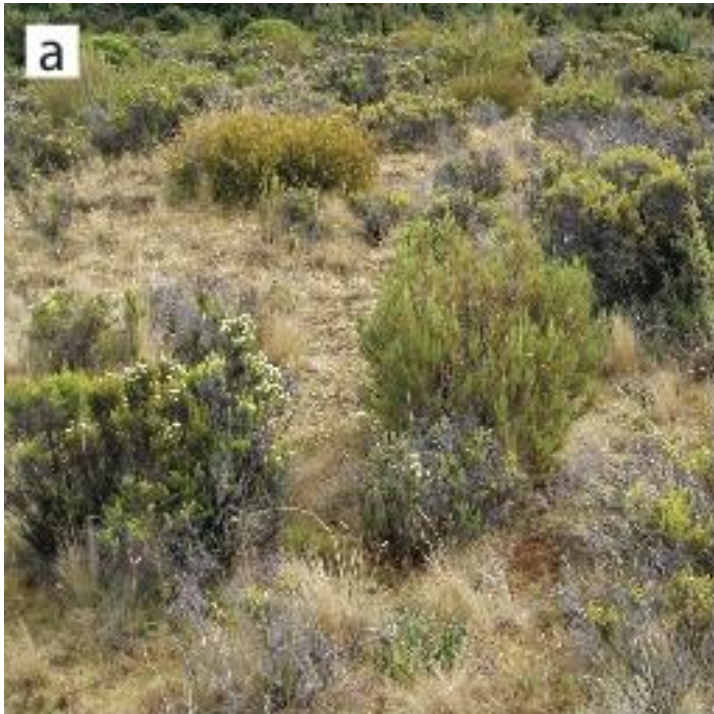
# Stage of invasion









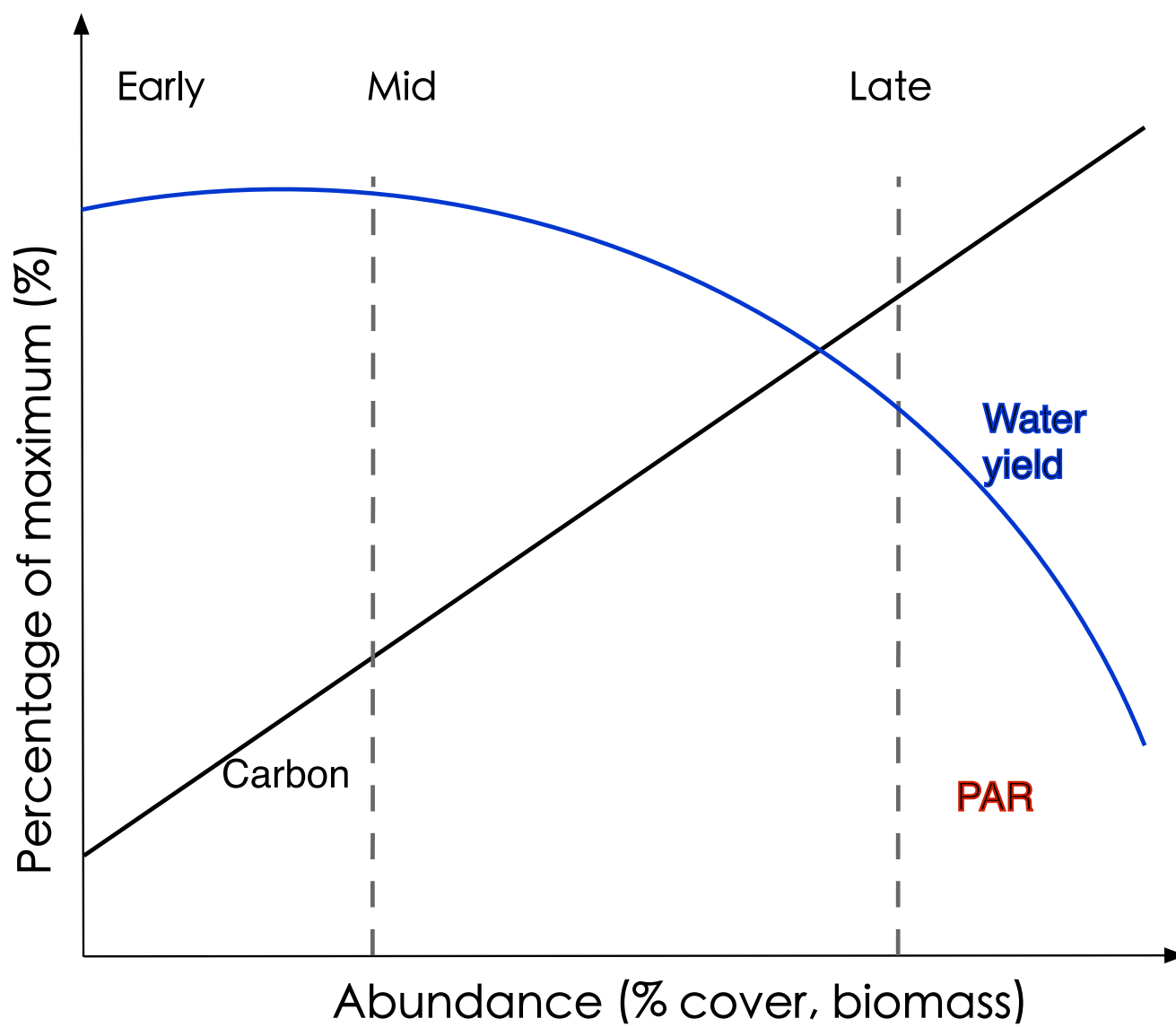




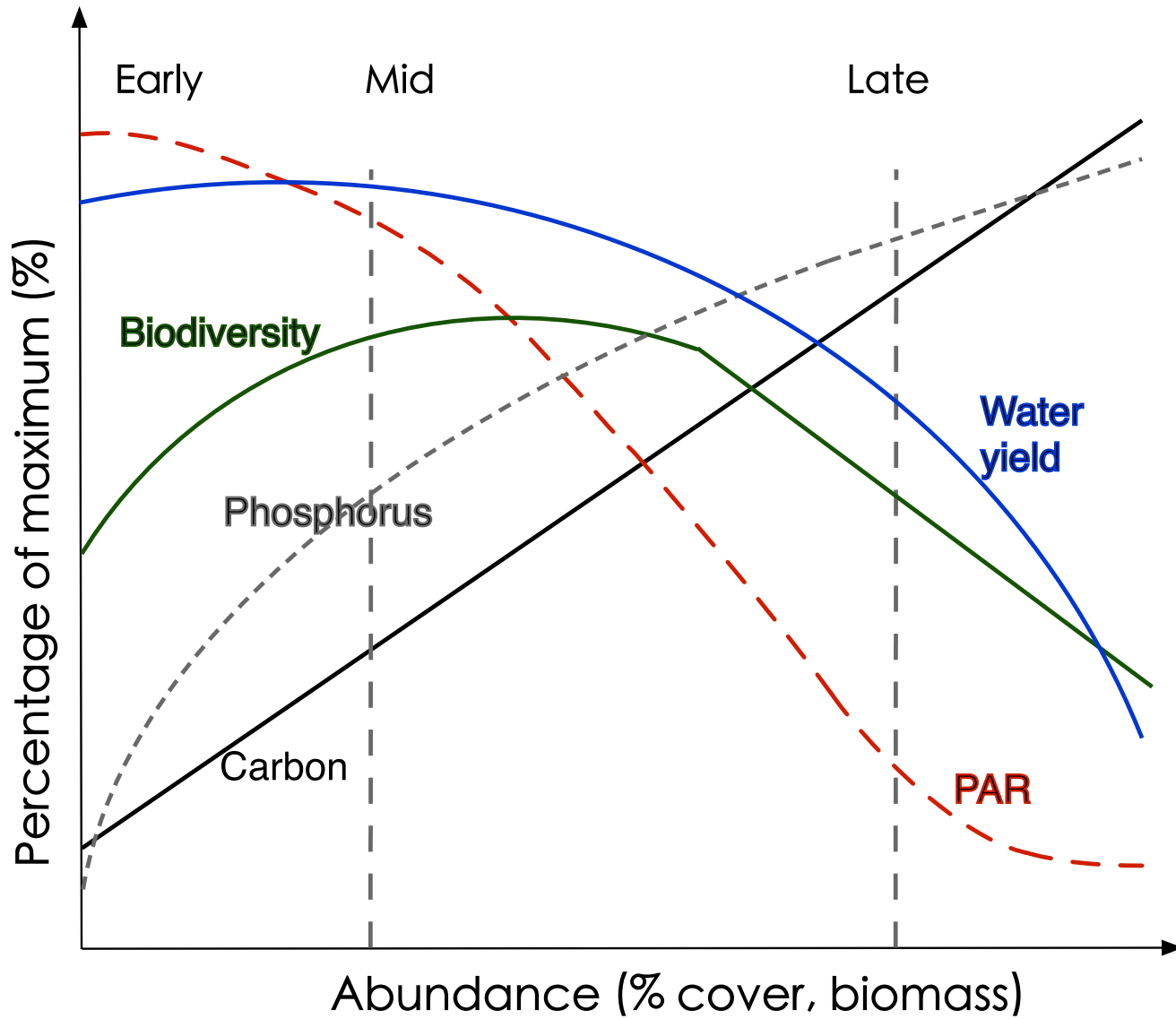


# Long-term invasions are complex ('wicked') environmental problems









Conservation grasslands

189 ha Douglas-fir C-credit planting

Sue Maturin photo



# Wilding Pines, Southland

- Richard Reeve

(Dunedin: Otago University Press, 2011)

*They may win, you know. The evidence is a  
Buddhist, hill-patient  
plotting of the white-haired botanist, pine after  
pine*

*stalking sunburnt slopes intent on eradicating  
these spiky green newcomers, rugged,  
hyperborean forms.*

*along the far slope yanked out of the soil, sliced  
or axed,  
thrown bottoms-up among fescue tussock, so  
that others behind him  
won't waste time on leftovers. Another says  
Sycamore, Douglas fir,  
in some Treaty of Tordesillas will divide up the  
earth.*

*We contemplate an end, rubbing sap off our  
fingers  
while rain moves up the valley, quietly like a  
shark,*

*nuzzling extremities of the mountain-range  
beyond us  
where there is yet something left of the older  
world.*

*Which might seem remarkable, yet here is the  
evidence \_  
yanked out of the stones, man bound up in his  
knowing*

# Impacts of wilding conifers on cultural values





# The 2015 challenge

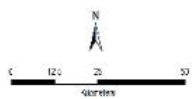
- How to assess the impacts of wilding conifers on non-market values?
- Three study sites: around Lakes Tarawera, Pukaki and Wakatipu



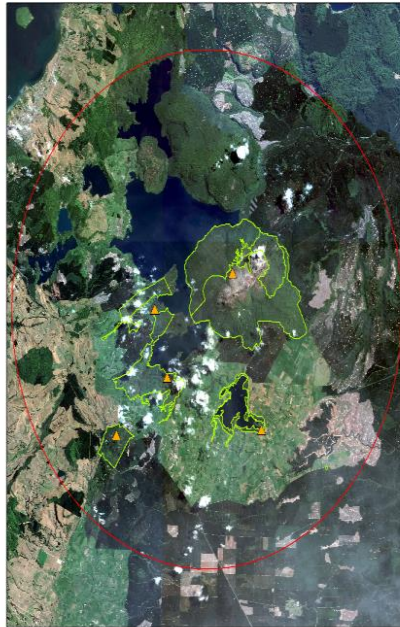
# QUEENSTOWN



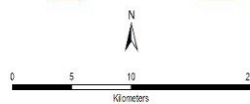
▲ MPI Survey    Scenario Boundary    Wilding Areas



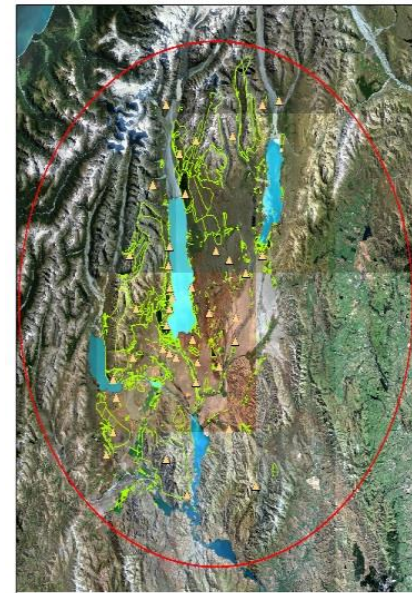
# TARAWERA



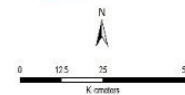
▲ MPI Survey    Scenario Boundary    Wilding Areas



# TWIZEL



▲ MPI Survey    Scenario Boundary    Wilding Areas



# Sites of significance

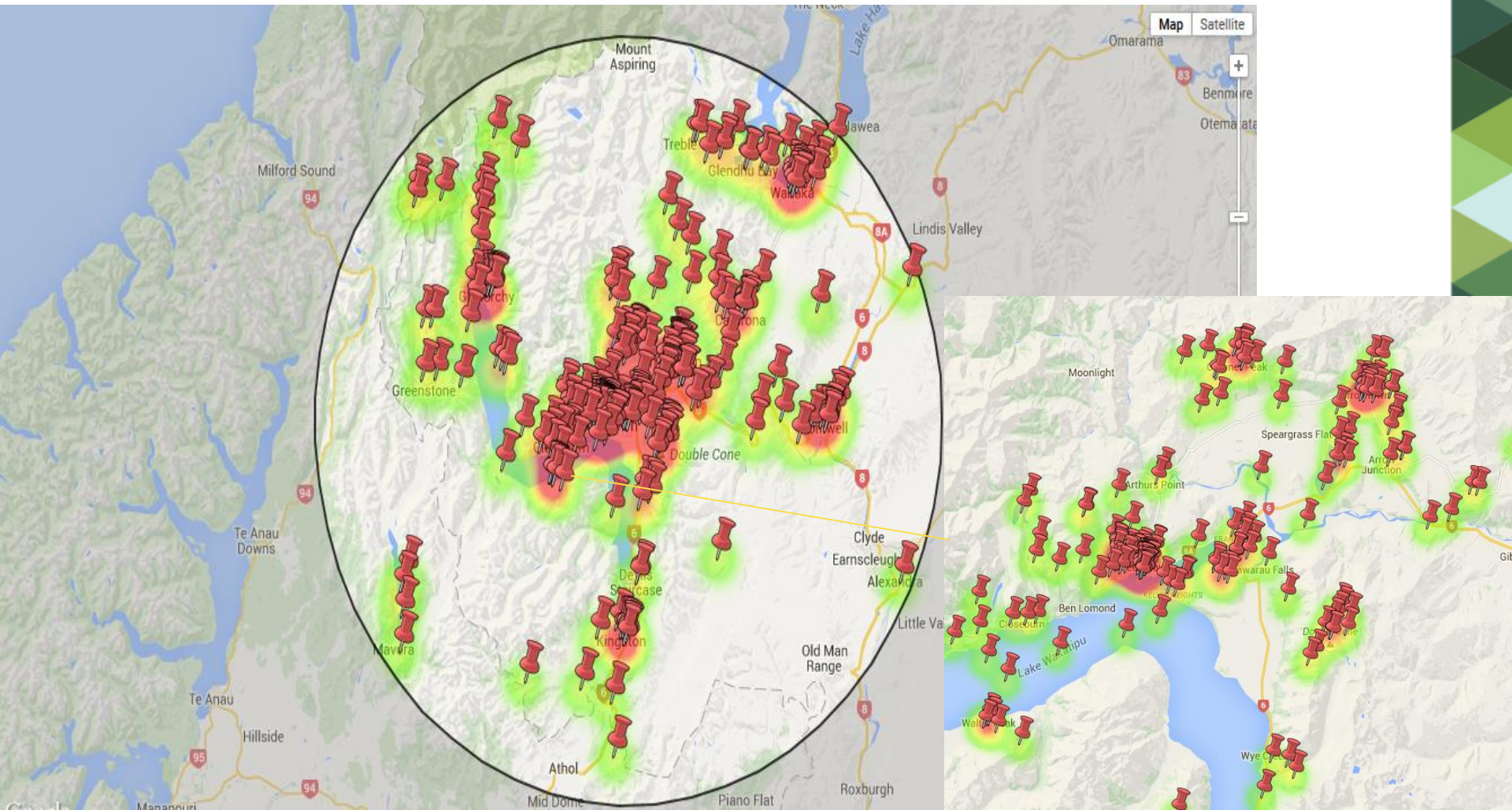
- Online survey
  - Cultural practices: what do people do to interact with each other and with the environment?
  - Environmental spaces: where do people interact with each other and with the environment?
  - Cultural ecosystem benefits: why people do what they do, what do they feel, and what benefits do they derive from these interactions?



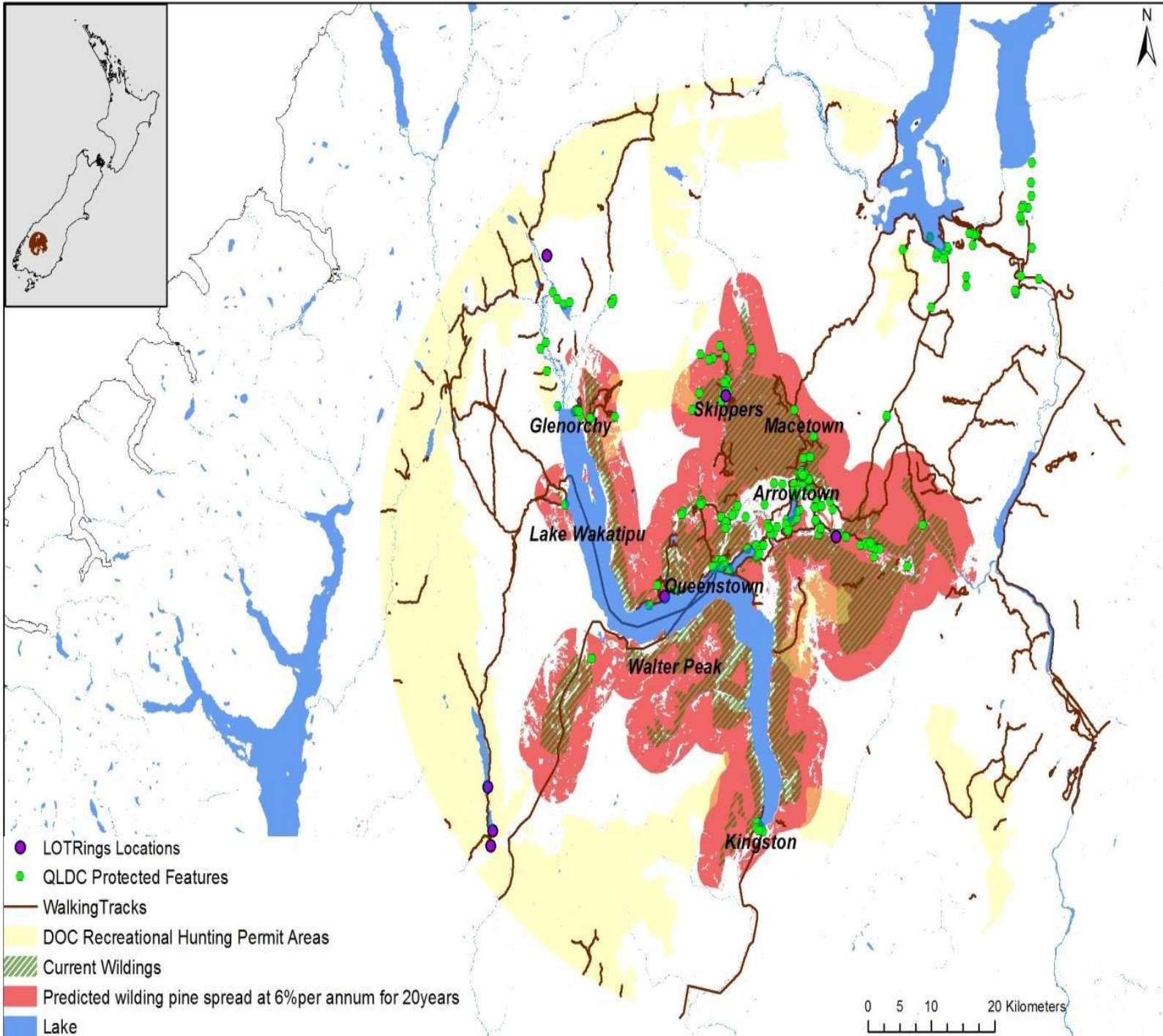
Environmental spaces	Cultural practices	Cultural ecosystem benefits		
		Identities	Experiences	Capabilities
<i>Wahi tapu</i> Spiritual places Burial sites <i>Maunga</i> Mountains Lakes Rivers Streams Gardens Parks Farmland Forests Beaches Seascapes	<i>Mahinga kai</i> Storytelling <i>Tikanga</i> <i>Manaakitanga</i> Creating Exercising Visiting Playing Gathering and consuming Producing and caring	Sense of place <i>Tūrangawaewae</i> <i>Whakapapa</i> Genealogy Belonging Attachment Rootedness Spirituality Sense of self Sense of society	Mauri Vitality Safety Tranquillity Inspiration Aesthetics Escape Discovery Memories	Spiritual <i>Wairua</i> Prestige Authority <i>Mana</i> Ethics Integrity Education Amenity Heritage Well-being Recreation Knowledge Health Dexterity

# Sites of significance

## Online participatory map and survey









# Interviews

# Queenstown





# Twizel



# Tarawera





# Useful stories

- Cultural values are
  - spatially and temporally specific
- Heritage is
  - still highly significant when not visible
  - Romanticisation
  - Shared through oral history
- Wildings are
  - ‘Alpine retreat’ of Queenstown’s Skyline area
  - Twizel – ‘town of trees’
  - LOTR and Hobbit films





# Impacts on cultural values

- Tourism
- Vegetation concern – differences by stakeholders
- Loss in heritage
  - Views
  - Continuation of land use (farming)
  - Uniqueness of landscape
  - Inability to ‘read’ heritage from the landscape
  - Loss of natural mana through degraded ecosystems
- Benefits
  - Shelter and erosion prevention
  - Aesthetics – enhance a barren stark landscape
  - Potential for new industries – recreation and tourism; film; biofuels; oils



# Ways forward?

- Valuable stories, relationships and concepts
- What are the implications for NZ Inc. of changing public-private responsibilities for invasive species?
- How are emerging socio-technological relationships of pest and weed management (i.e. new values, practices and technology) shaping NZ's landscapes?

# New MBIE bid

Integrated research is needed to resolve where and when management can maximise desirable landscape transformations whilst minimising costs and negative impacts.

Landcare/Scion/Lincoln U./Collaborators