A Protected Corridor for Travelling Stock and Biodiversity

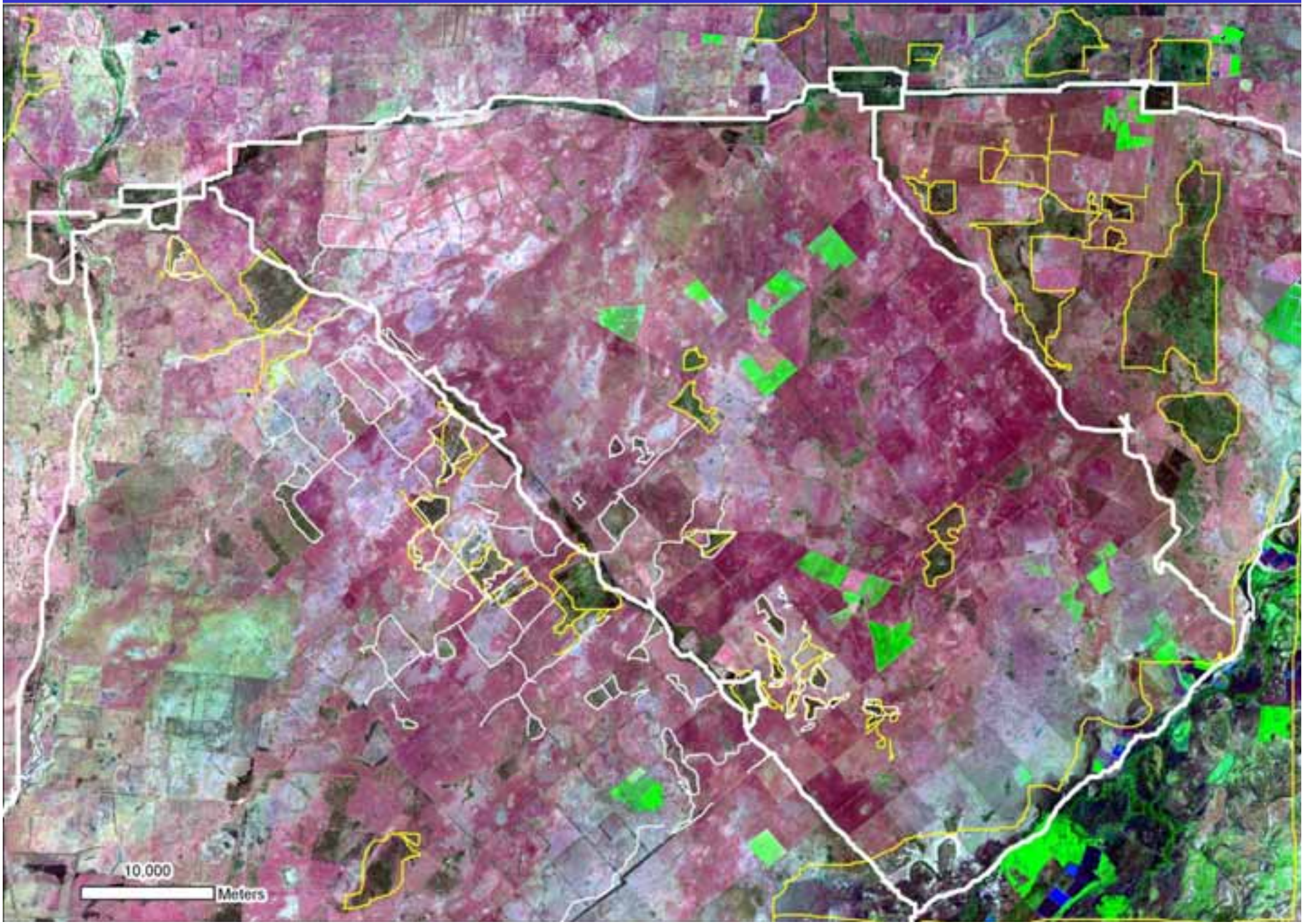
The case for conservation of the NSW TSRs and Qld SRN

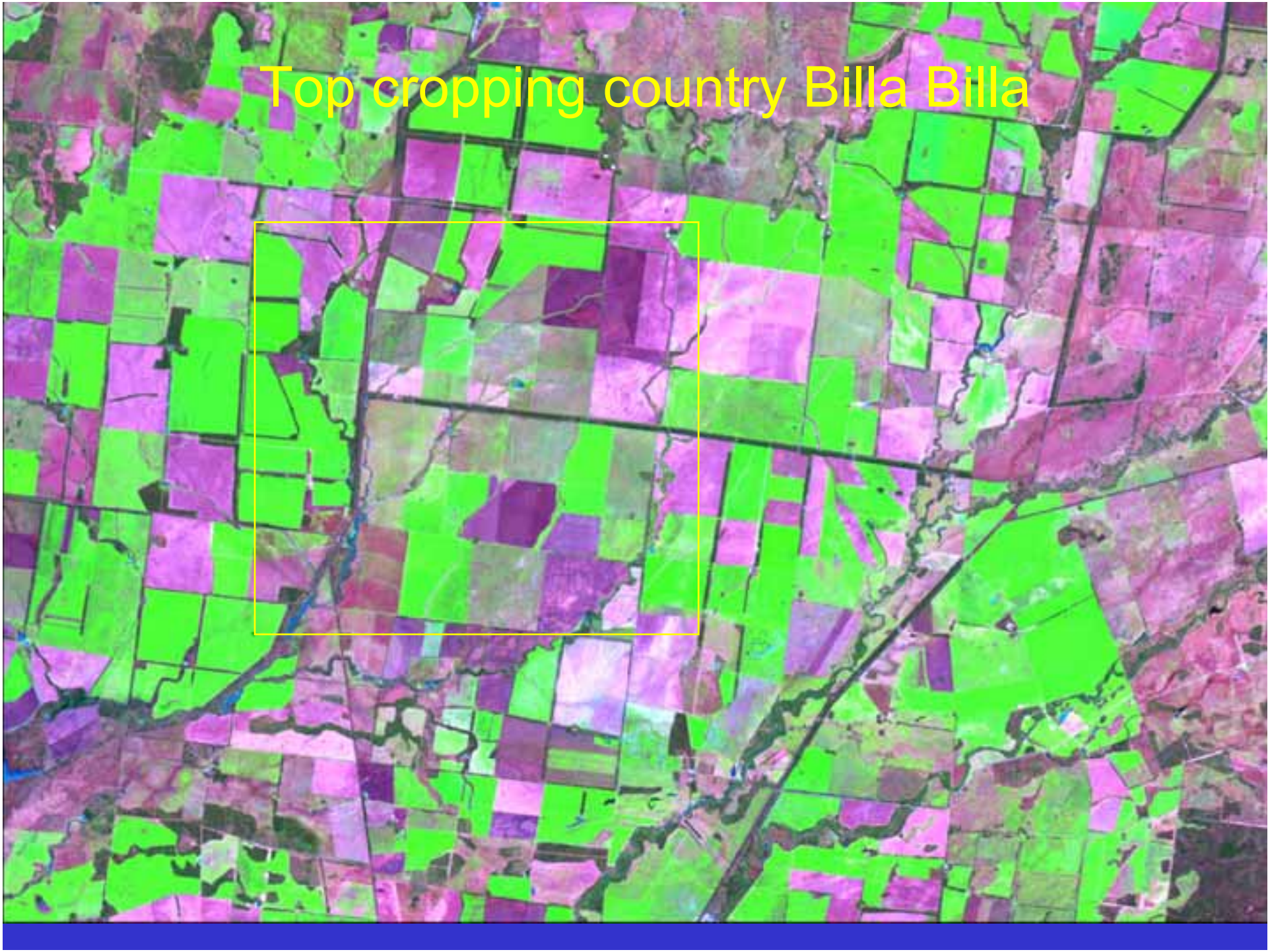
Presented on behalf of the Stock Routes Coalition

Prepared by
Bob Sutherst, Evan Cleland, Judit Szabo, Grahame Rogers and many helpers

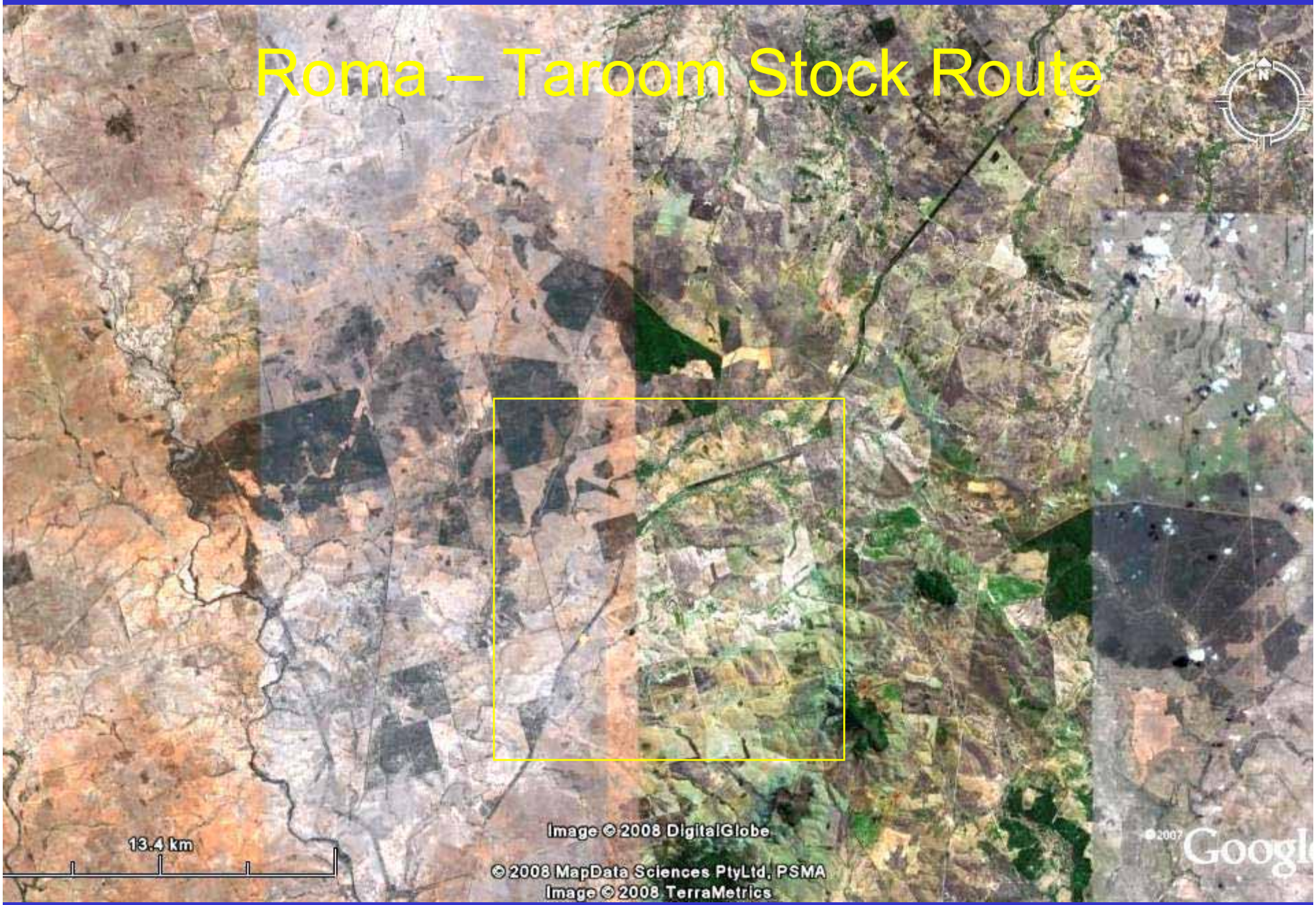
Wildlife Queensland
YOUR VOICE FOR YOUR WILDLIFE

Stock Routes Dirranbandi - Bollon

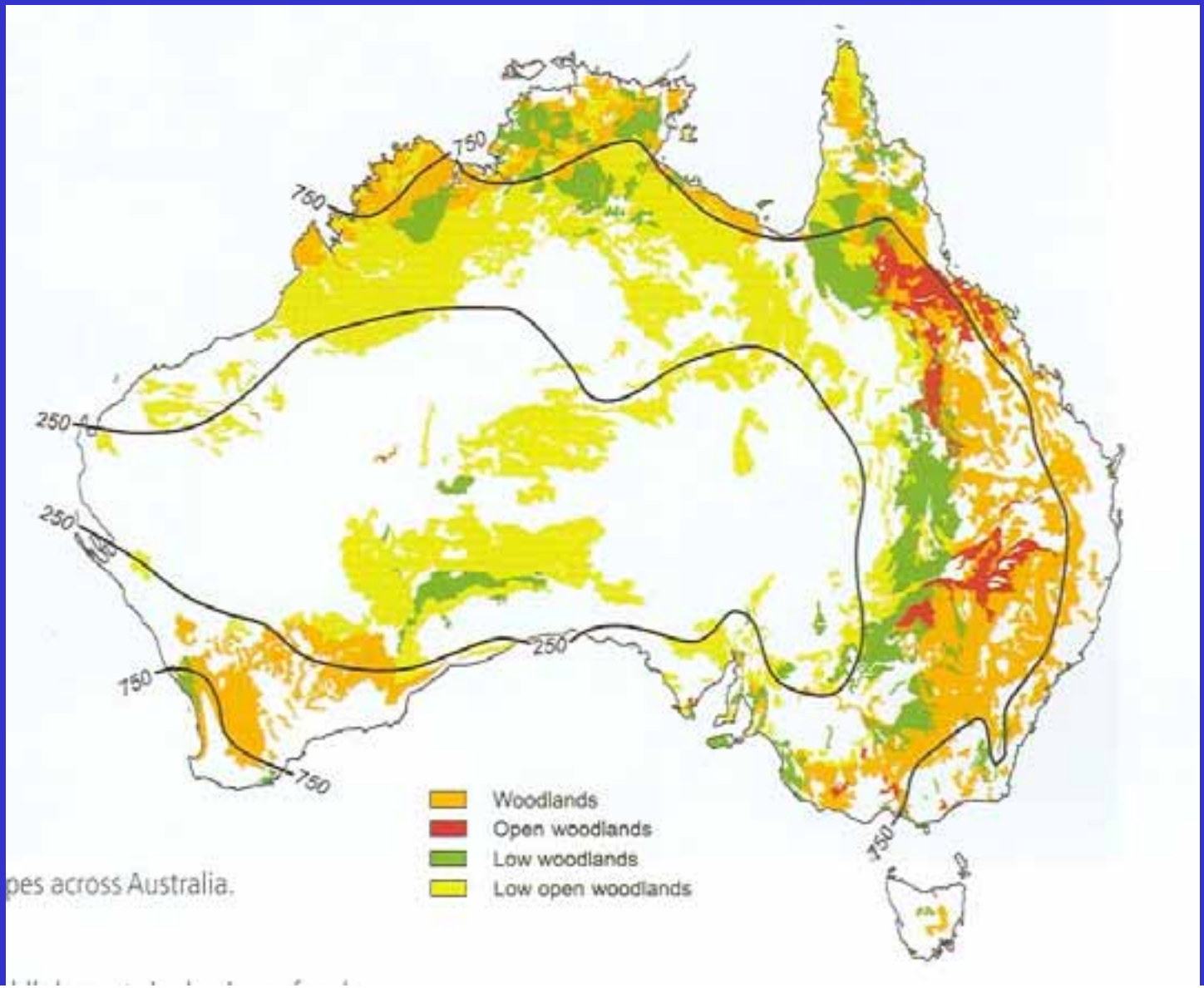



Top cropping country Billa Billa

Roma – Taroom Stock Route



Eastern Australia only North – South Woodland corridor

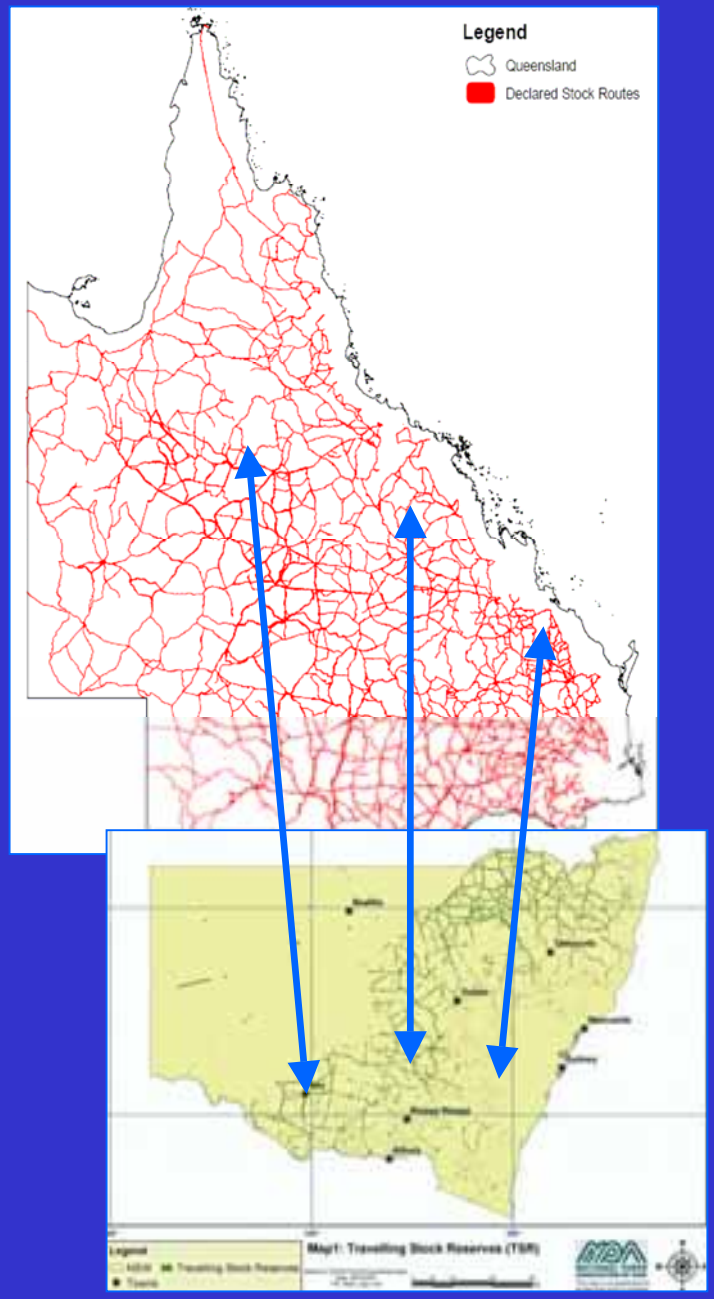


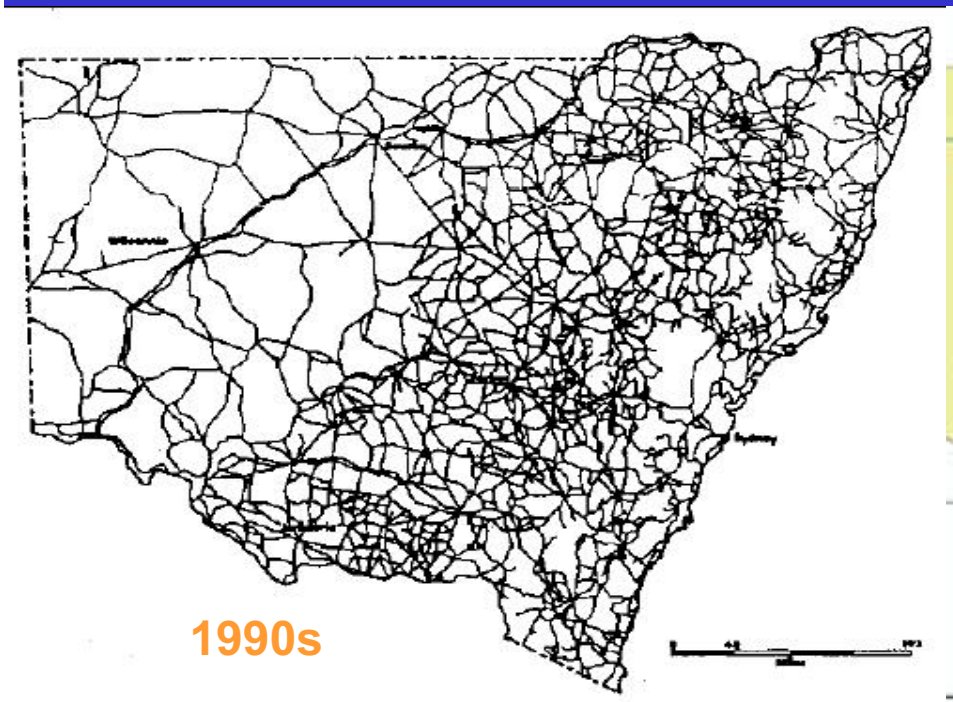
Eastern Australia Stock Route Networks

A National Resource

Requires:

National Funding for National Values





1990s

The NSW TSRs are being devastated

1 Historical Pattern of stock route use

(Fenced sections)

- Short, intense grazing between long rests
  - When the water or feed is gone – no stock
  - Demand reduced in good seasons

2 Historical Pattern of stock route use

(Fenced sections)

- 150 years of this practice has favoured native vegetation
  - The network supports the maintenance and distribution of many native species
  - Some species now only found on stock routes and reserves

3 Historical Pattern of stock route use

(Fenced sections)

- Stock routes today contain wildlife conservation values not originally envisaged
  - These conservation values are of national significance.

Benefits of the stock routes for biodiversity

- Connect Reserves with other remnants across the regional landscape.
- Provide *refugia* for rare and endangered native species
- Facilitate seasonal movements by species in normal and extreme seasons
- Facilitate progressive shifts by species with climate change

Social and Economic Benefits of Stock Routes

Provide an Australian Outback landscape

Promote eco-tourism

Promote recreational use

Recreation

Reduced droving income stimulating authorities to *rationalise* the networks

- Continuous agistment of inactive parts of SRN
- Divestment of parts of the TSR network

These changes threaten the Networks when new threats are emerging from:

- Climate change to environmental values
- Peak Oil and Carbon Trading to livestock transport

- Current funding models do not recognise the *national environmental and social benefits*

- Neither Queensland nor NSW included *climate change* in their policy reviews

The case for a '*Protected Corridor for Travelling Stock and Biodiversity*'.

- ✓ Provides corridor links of high quality vegetation
- ✓ SRN/TSRs include representative landscapes, soils and vegetation
- ✓ They lie along environmental gradients in all directions
- ✓ The stock routes provide a vast network across inland NSW and Queensland where few other connectivity options are available
- ✓ Stock routes provide an opportunity to assist species to adapt to climate change
- ✓ Opens opportunities for environmental funding

ACHIEVABLE FOR $1.70 HA PER YEAR

The Role of a ‘Protected Corridor for Travelling Stock and Biodiversity’ as

an

Adaptation Resource under Climate Change

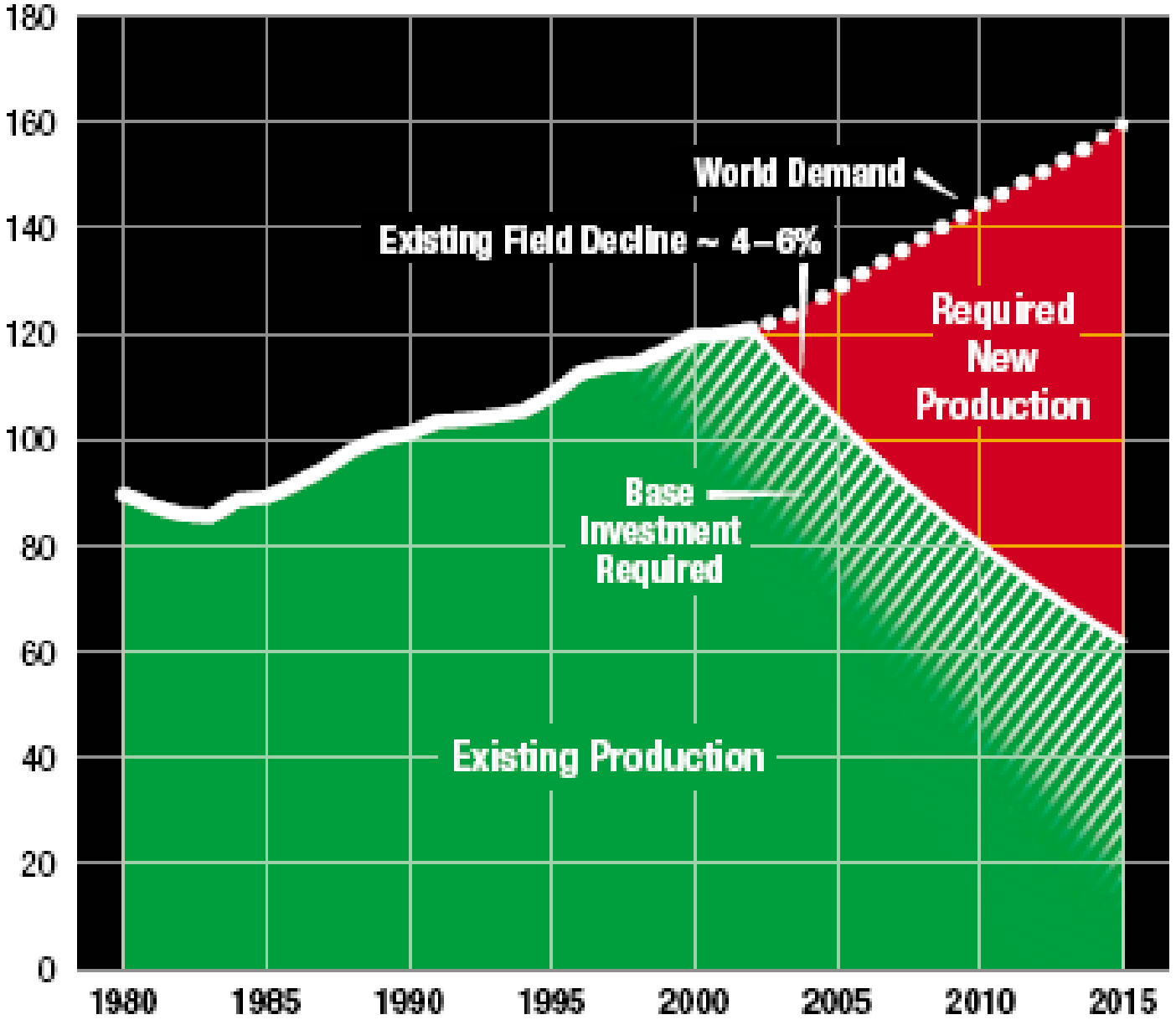
Future Threats and Opportunities

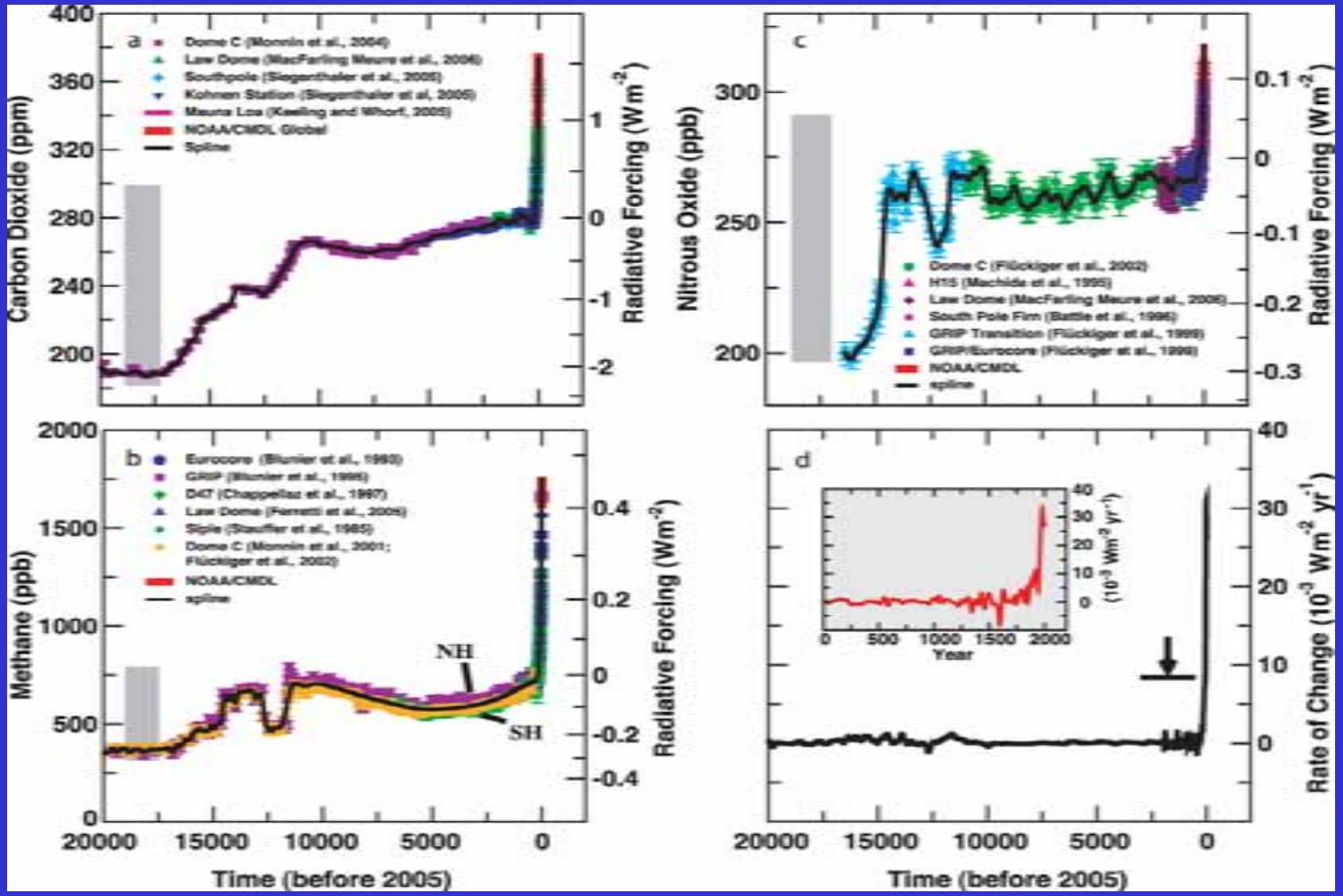
- ***Peak Oil***, ***Chindia*** and ***Carbon Trading*** will blow out fuel costs and favour droving over road/rail livestock transport

- ***Climate Change*** threatens Biodiversity

Supplying Oil and Gas Demand Will Require Major Investment

Millions of Barrels per Day of Oil Equivalent (MBDOE)





The concentrations and radiative forcing by (a) CO2, (b) CH4 and (c) nitrous oxide (N2O), and (d) the rate of change in their combined radiative forcing over the last 20 kyr reconstructed from Antarctic and Greenland ice.

Global Challenge:
How to Prick the Carbon Bubble?

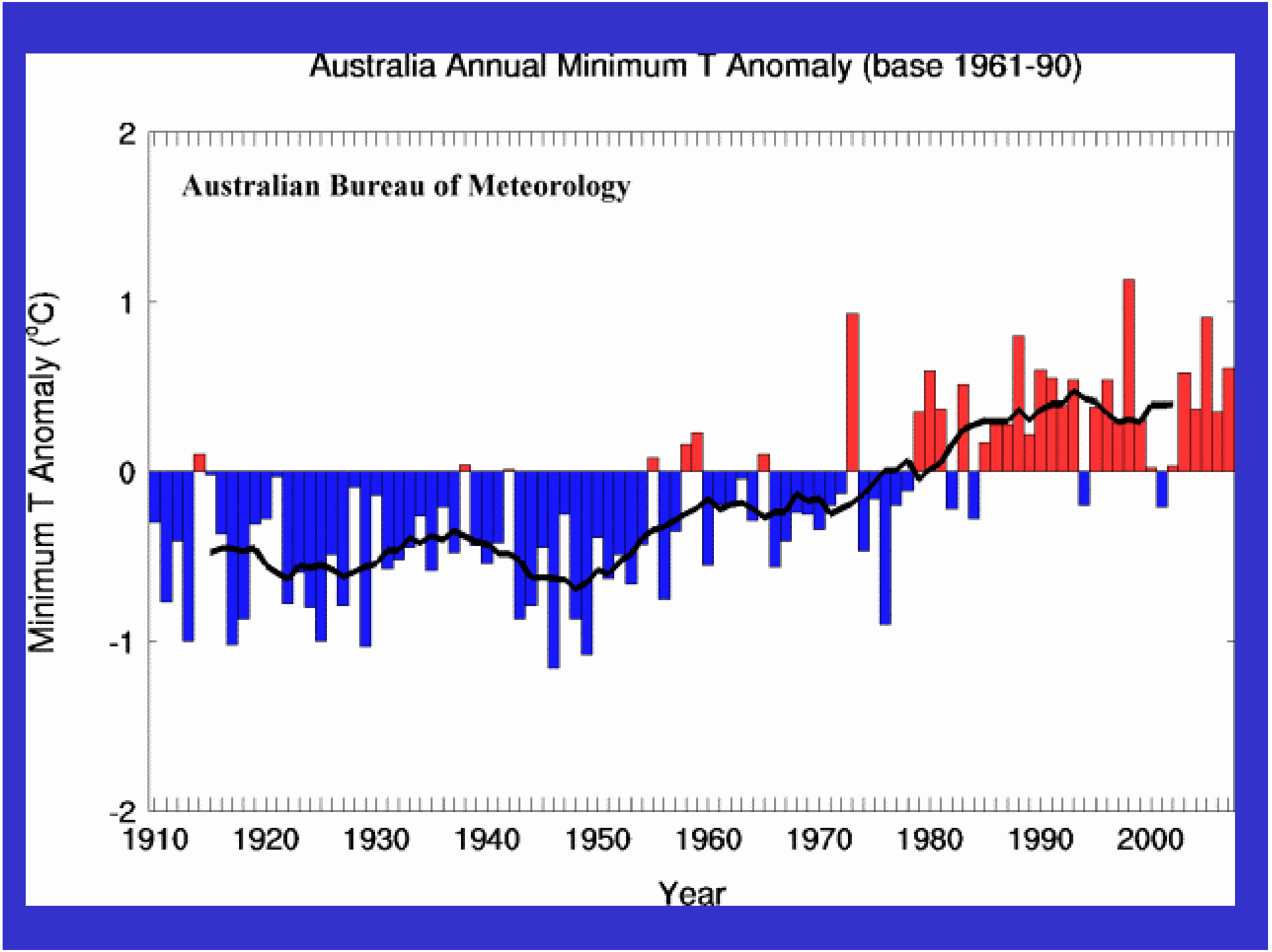
How to reverse the increasing concentration of greenhouse gases?

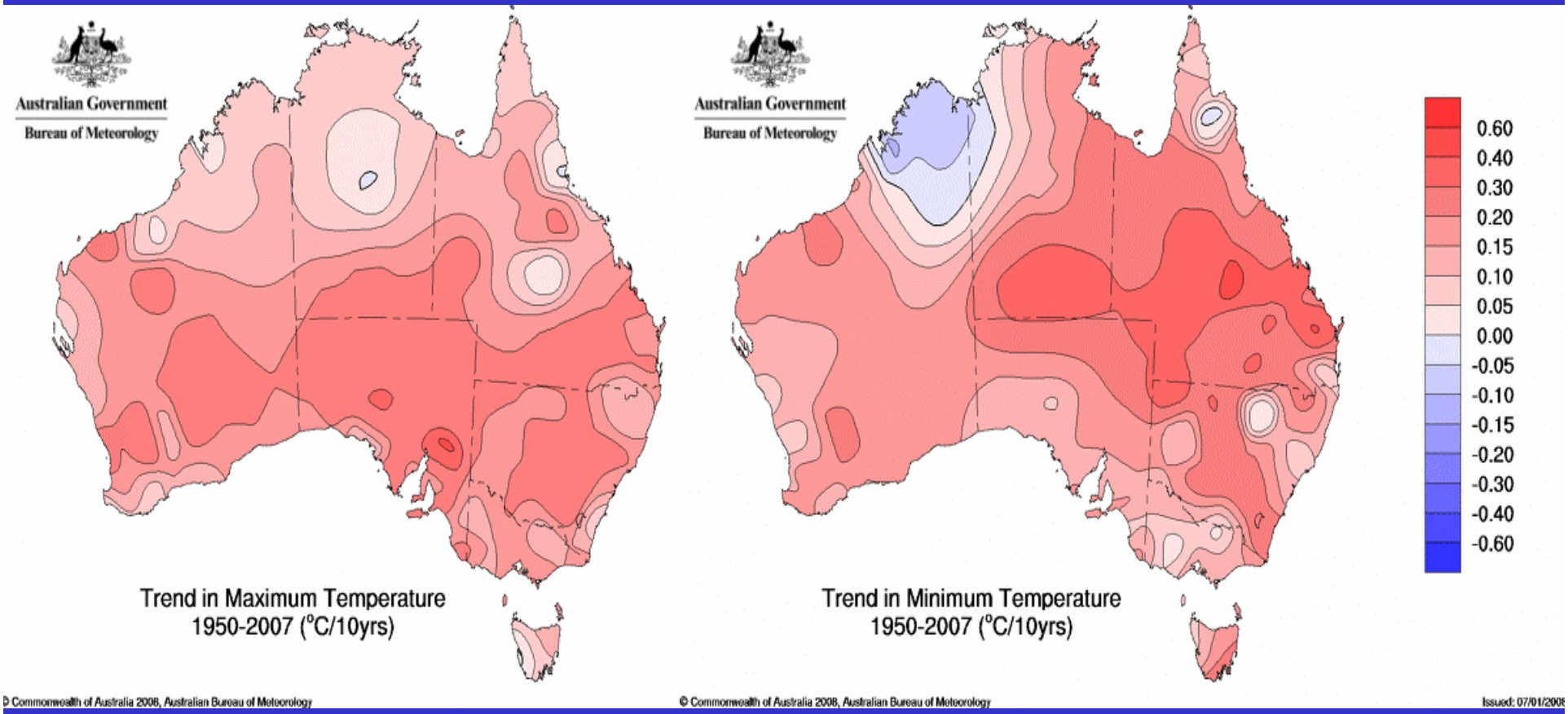
How to reverse the damage that has been done already?

Answer: Carbon Credits/Taxes + Peak Oil

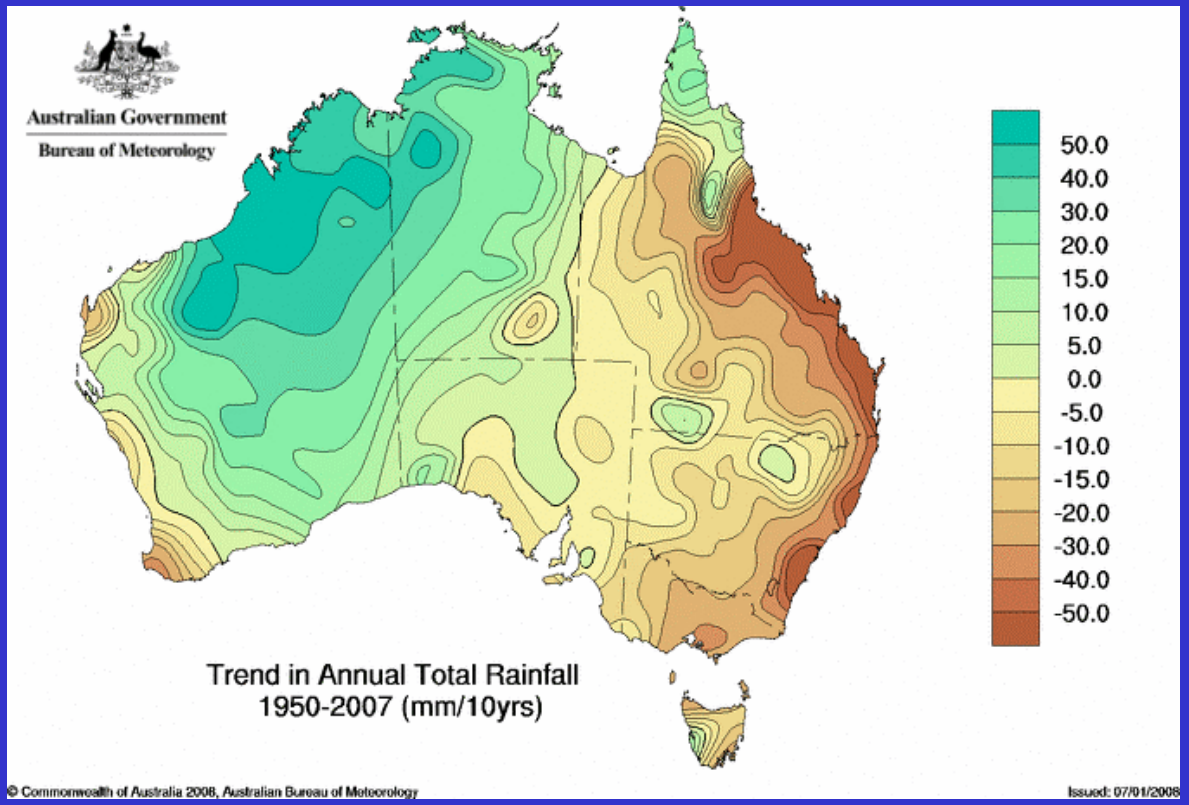
Result: Soaring electricity and transport costs

Droving to make a comeback?

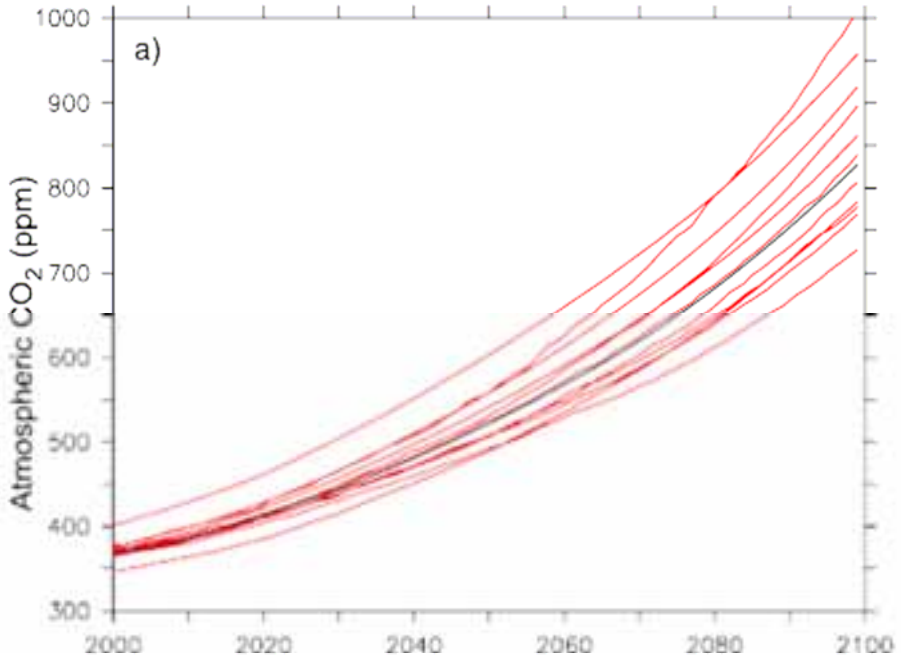

Australia Annual Minimum T Anomaly (base 1961-90)
Australian Bureau of Meteorology
Minimum T Anomaly (°C)
2
1
0
-1
-2
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
Year

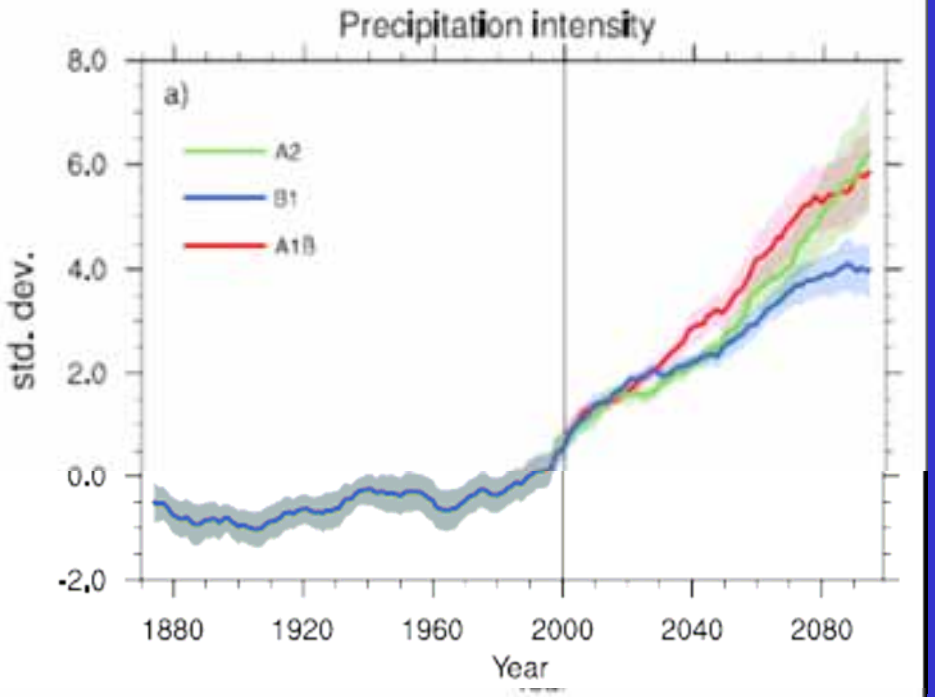


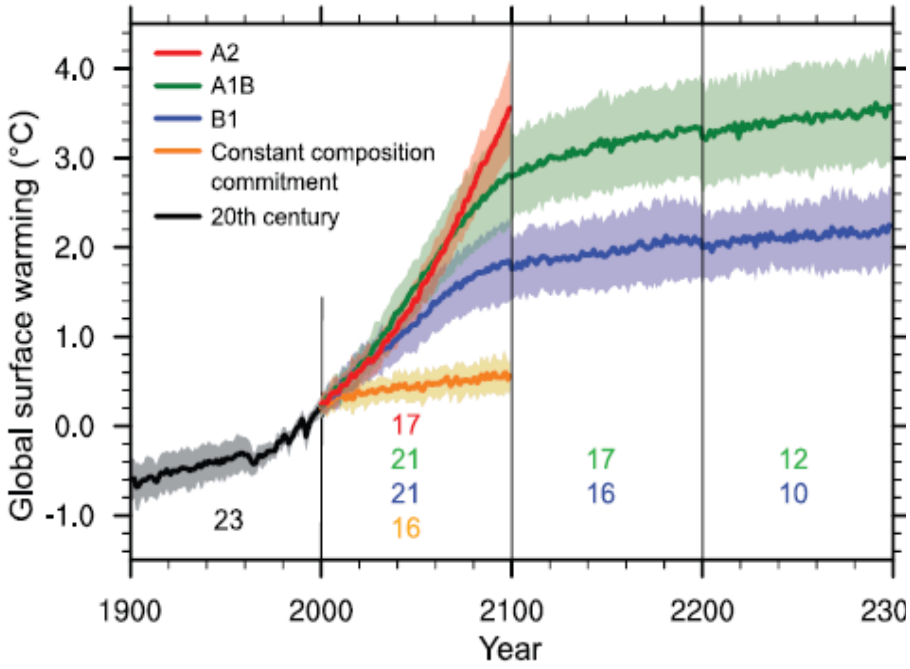
Temperatures vary geographically, seasonally & daily

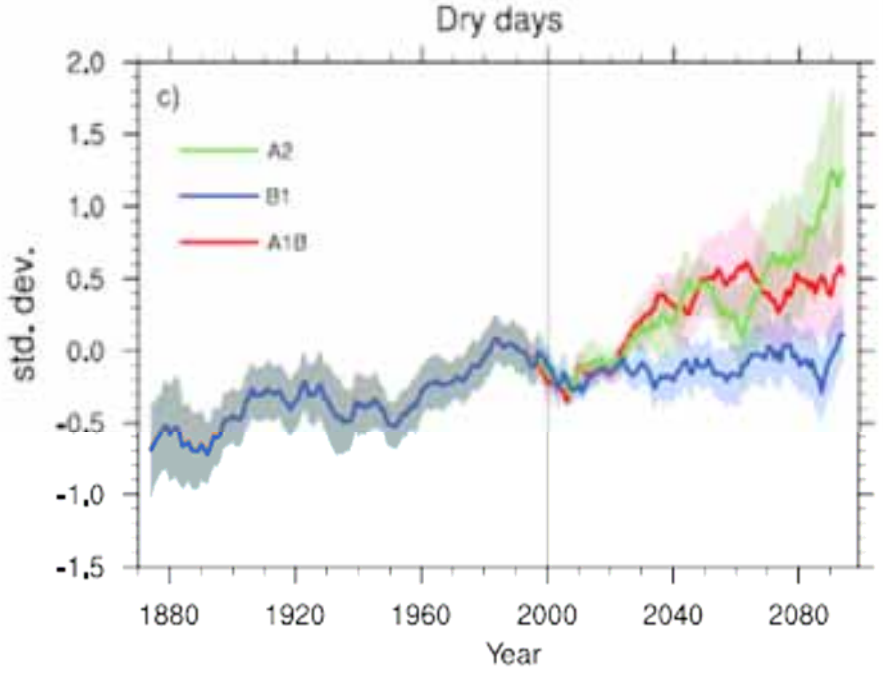


Rainfall varies geographically, seasonally & daily


a)
Atmospheric CO_2 (ppm)
1000
900
800
700
600
500
400
300
2000
2020
2040
2060
2080
2100


Precipitation intensity
a)
A2
B1
A1B
std. dev.
8.0
6.0
4.0
2.0
0.0
-2.0
1880
1920
1960
2000
2040
2080
Year

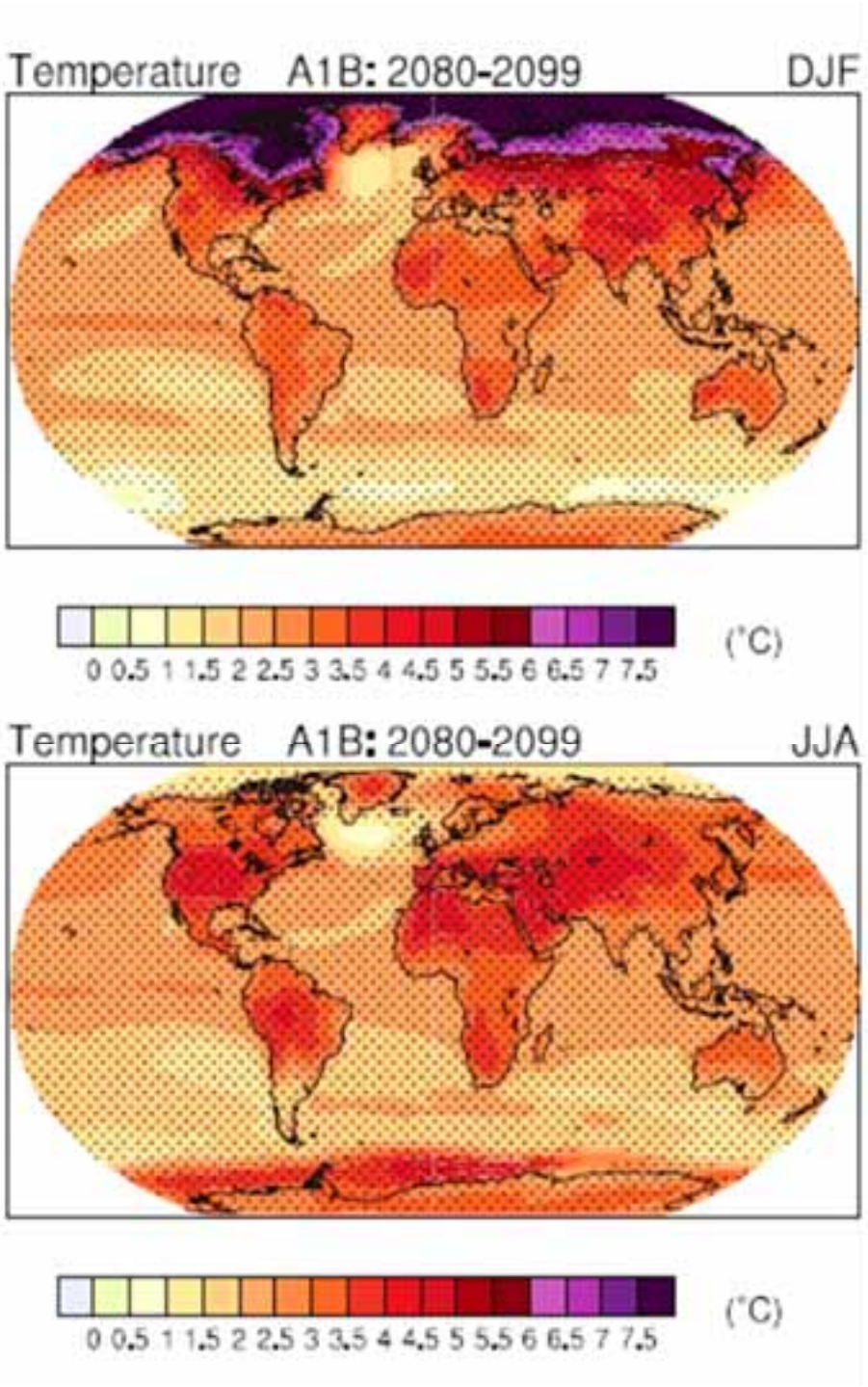

A2
A1B
B1
Constant composition commitment
20th century
Global surface warming (°C)
4.0
3.0
2.0
1.0
0.0
-1.0
23
17
21
21
16
17
16
12
10
1900
2000
2100
2200
230
Year


Dry days
c)
A2
B1
A1B
std. dev.
2.0
1.5
1.0
0.5
0.0
-0.5
-1.0
-1.5
1880
1920
1960
2000
2040
2080
Year

IPCC 2007

Top Boreal Winter

Bottom Boreal Summer

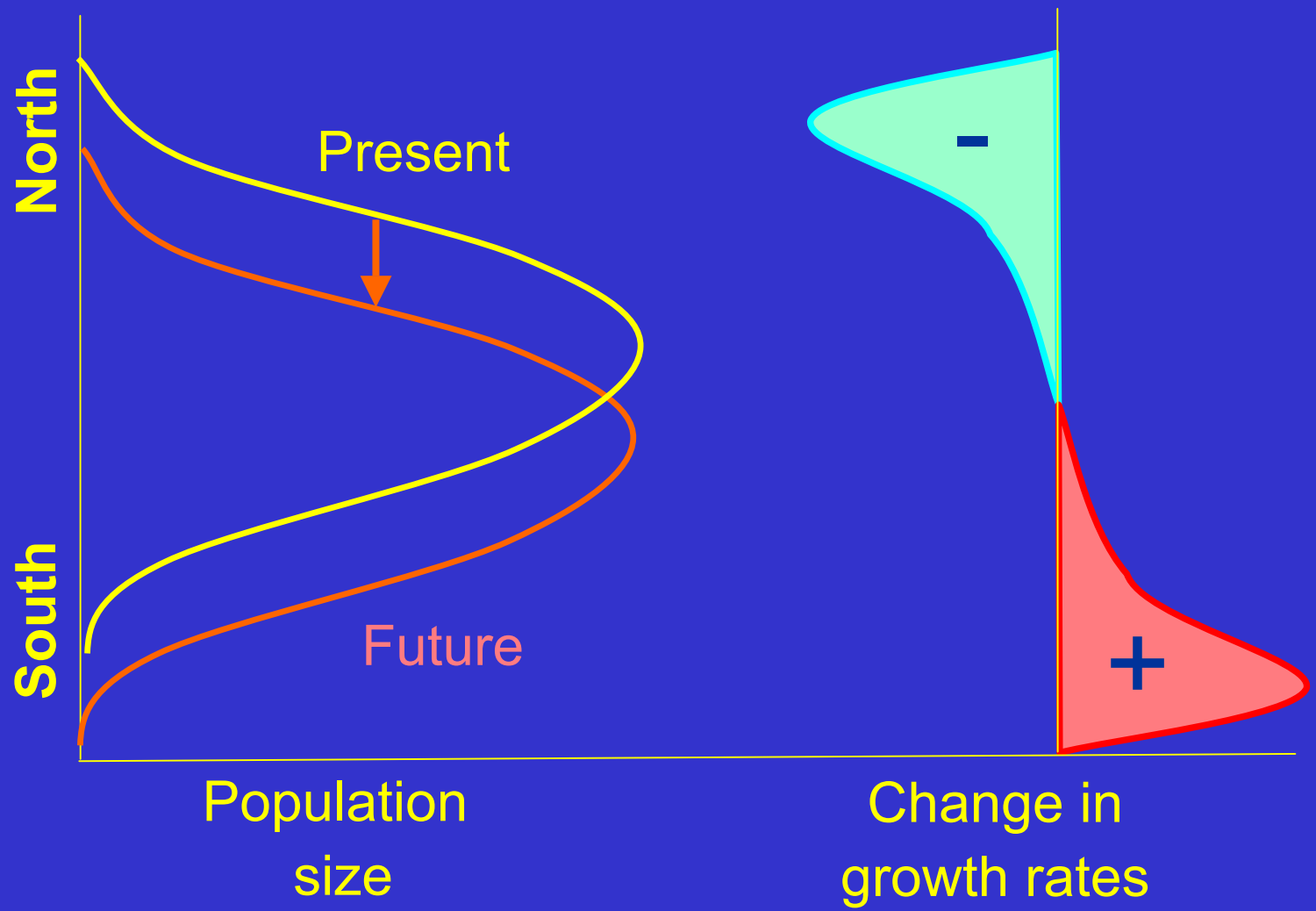


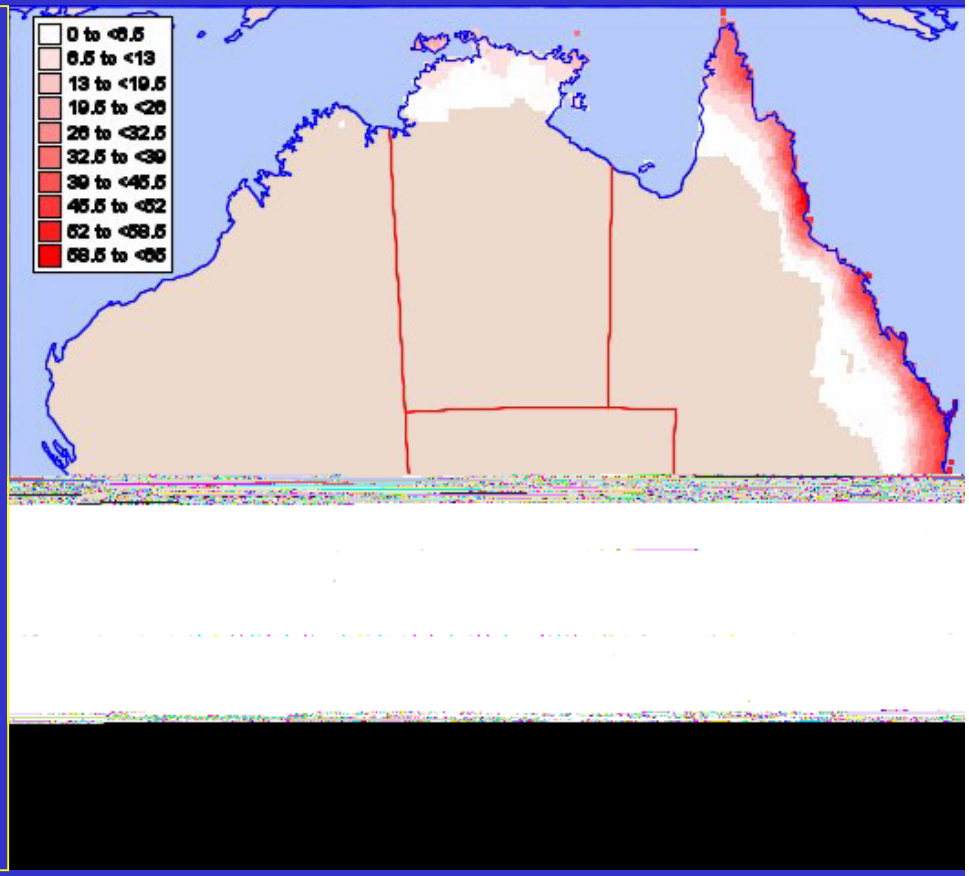
Environmental threats from climate change

Disrupts ecology of flora & fauna

Changes breeding patterns of birds and insects

Species Adaptation to Global Warming





Modelling suggests that the **Pacific Baza's** range will expand in the south-east with a change of +2^{o}C

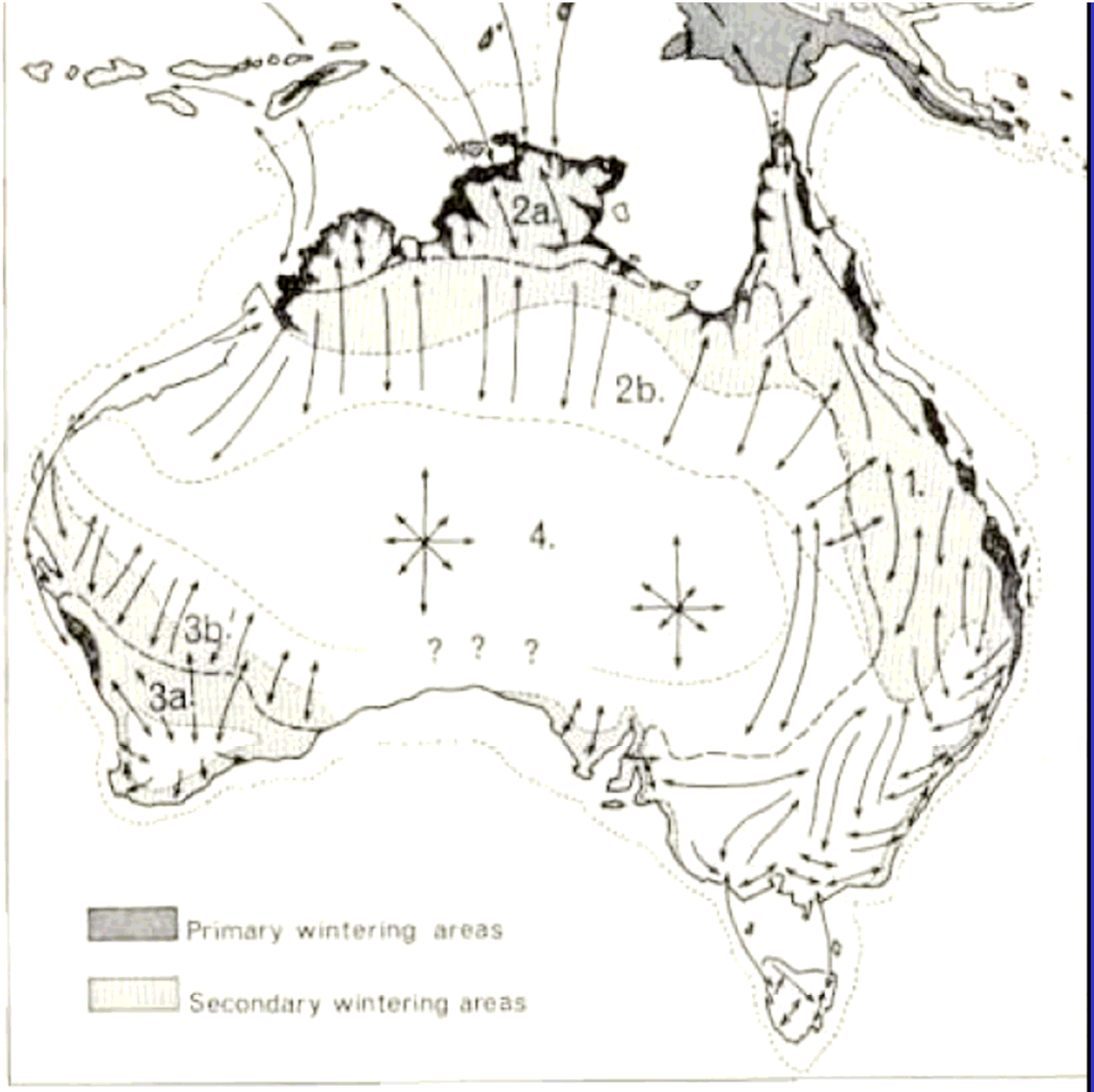
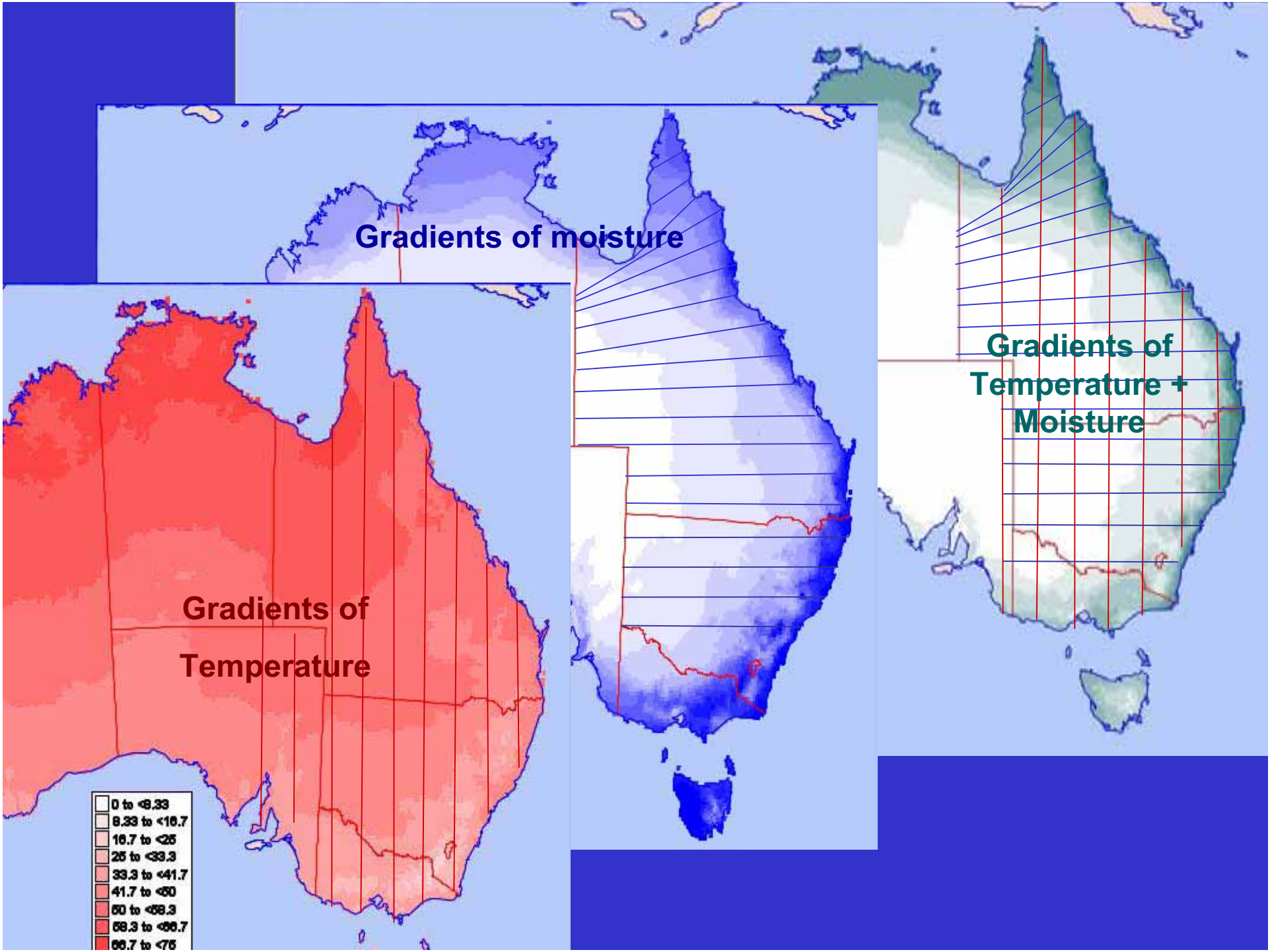
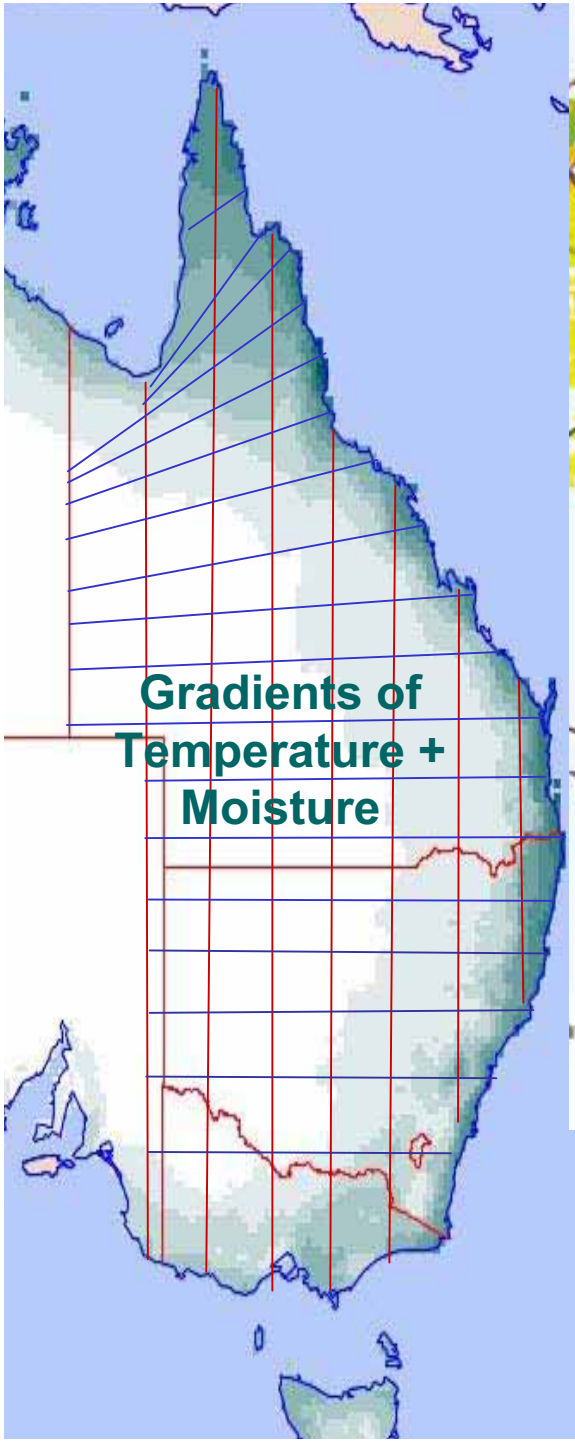
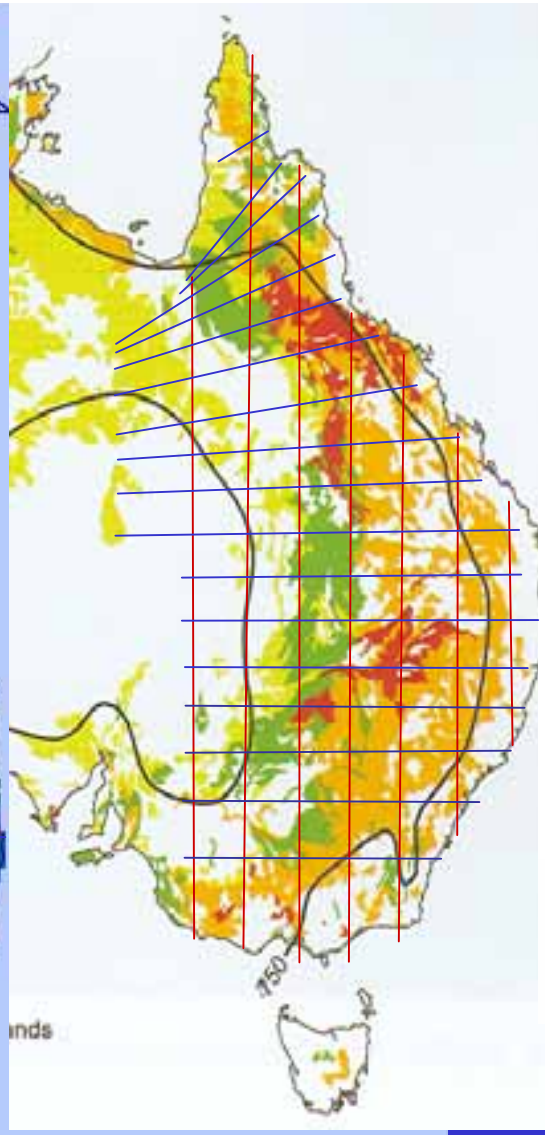
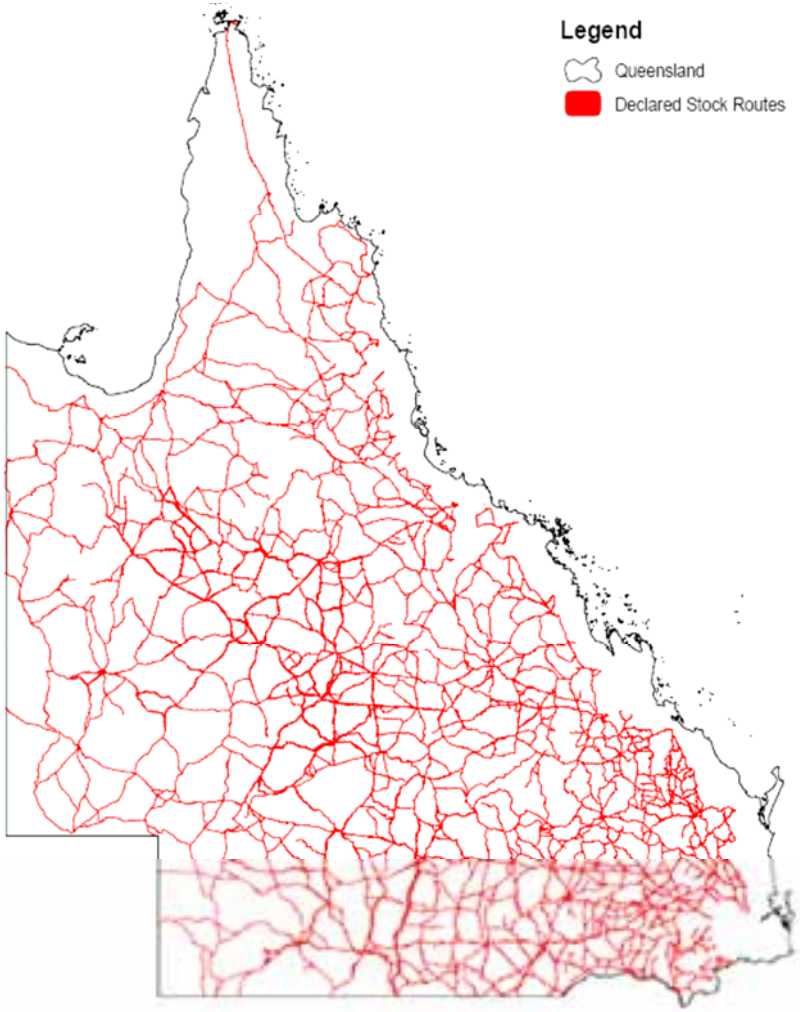


FIGURE 20. Predicted overwintering areas and seasonal movement patterns.


Gradients of moisture
Gradients of Temperature + Moisture
Gradients of Temperature
0 to <8.33
8.33 to <16.7
16.7 to <25
25 to <33.3
33.3 to <41.7
41.7 to <50
50 to <58.3
58.3 to <66.7
66.7 to <75







The SRN is a fortuitous inheritance that is worth more than the sum of its parts

Details of climate change are uncertain but they will not be uniform or linear

Climate change varies geographically, seasonally & daily

This has important consequences for how we plan to adapt to (unknowable) environmental changes.

That means providing ***enhanced corridors along all environmental gradients. A Rehabilitated Stock Route Network is central to that strategy***

Coalition Objectives:

SHORT TERM:

To have the New South Wales and Queensland governments put an immediate moratorium on disposal or lease of any segments of the stock routes until they have taken account of their potential benefits for biodiversity under climate change

Coalition Objectives:

NSW and Qld governments:-

- Embed the conservation values of the stock route networks in policy and protect their day-to-day management in perpetuity.

- Create by legislation, a ***Protected Corridor for Travelling Stock and Biodiversity*** to encompass the entire remaining NSW TSR network and Qld SRN

- Governments to fund public interest / Biodiversity component and enhance the networks through the regional funding component of the Australian Government's NRM Initiative and other relevant sources

”Don’t it always seem to go
That you don’t know what you’ve got
Till it’s gone”

Excerpt from Big Yellow Taxi
(by Joni Mitchell)