SOUTHERN &
SOUTH-WESTERN
FLATLANDS
NRM CLUSTER
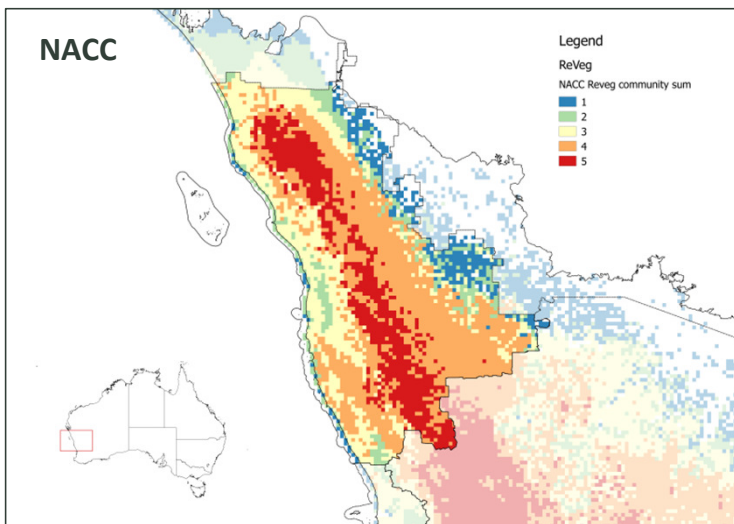
CLIMATE
CHANGE
IN AUSTRALIA

IMPACTS & ADAPTATION
INFORMATION
FOR AUSTRALIA'S NRM REGIONS

Species distribution modelling: Incorporating climate change into natural resource management planning

## Can we identify areas suitable for revegetation or corridor plantings?

Species distribution modelling can identify groups of species with similar responses to climate variables, contemporary communities are more likely to persist where number of groups is greatest – examples from northern and southern SW WA

NACC

Legend
ReVeg
NACC Reveg community sum
- 1
- 2
- 3
- 4
- 5

Each group is composed of a suite of species with similar important climate variables.

Northern Agricultural Catchments Council (NACC) –
- Species selected as having potential in revegetation projects
- Total of five groups of species with similar important climate variables
- 'Corridor' of suitable climate for NACC selected revegetation species identified where most

Legend
National Parks
Reveg area
Groups
- 1
- 2
- 3

Gondwana Link corridor revegetation
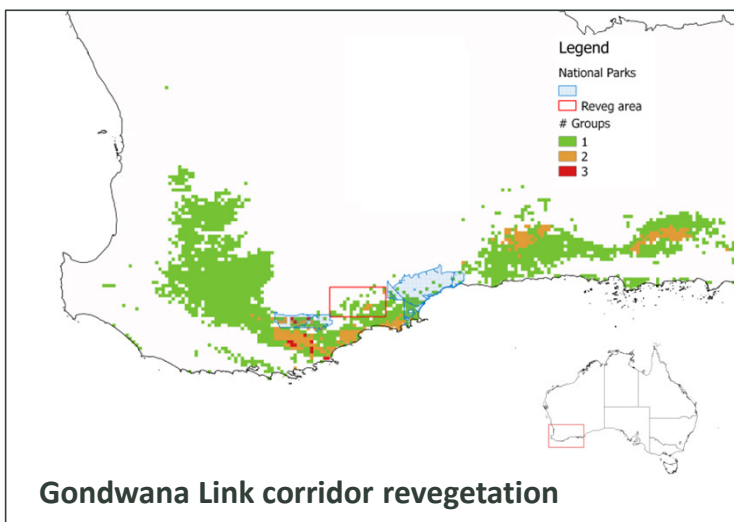
Gondwana Link
- Project to revegetate a 'corridor' between Stirling and Fitzgerald national parks
- Species are most common species used in Gondwana Link project
- Total of three groups of species with similar important climate variables
- Vegetation "community" does not appear to remain intact in the area being revegetated

- Predictions are based on high emission scenario (A2) by the 2080s
- Maps display count of groups in each cell with ≥ 50% of their species (proxy for community)

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