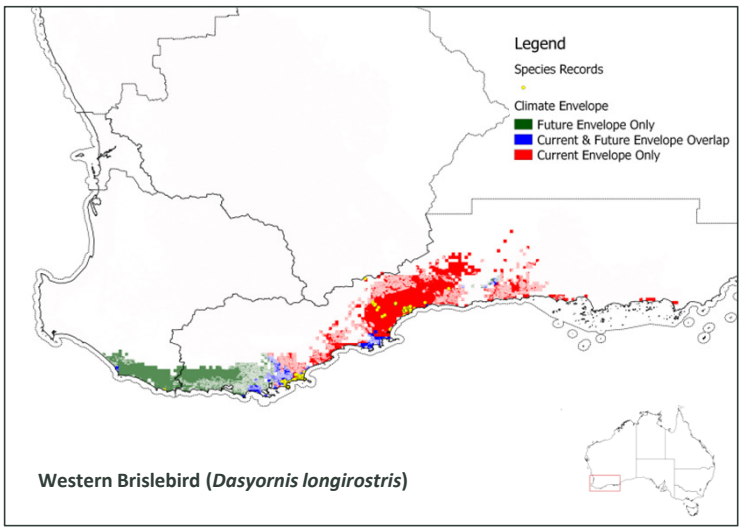
SOUTHERN & SOUTH-WESTERN FLATLANDS NRM CLUSTER

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 the potential translocation of threatened species?

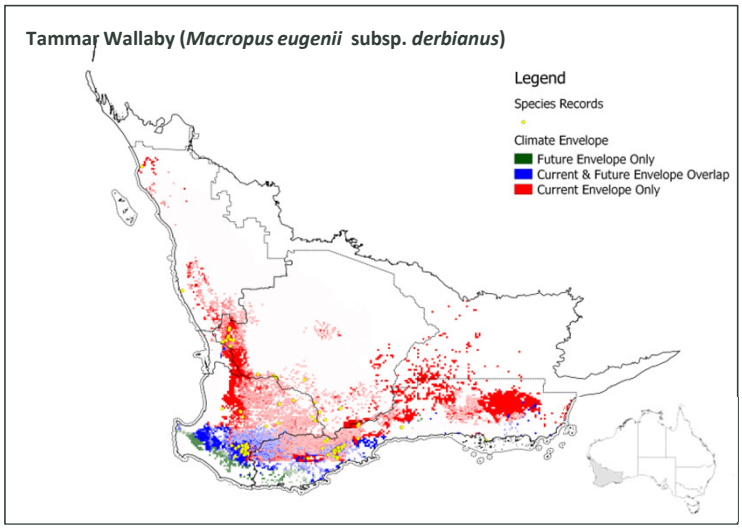
Species distribution modelling can identify areas of current and future climate suitability, or refugia from climate change – examples using Western Bristlebird & Tammar Wallaby



Western Brislebird (*Dasyornis longirostris*)

Western Bristlebird –

- Most records in area of future unsuitable climate
- Identified future suitable climate further west, extending into new NRM region
- Consider translocating species as management option



Tammar Wallaby –

- Three 'populations' need different management
  - North – Future climate unsuitable
  - East – In climate overlap but in area of low remnant vegetation
  - South – In vegetated land and climate overlap

- Predictions are based on high emission scenario (A2) by the 2080s
- Darker shading indicates presence of remnant vegetation

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An Australian Government Initiative

Natural Resources Eyre Peninsula

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SOUTHCOAST Natural Resource Management