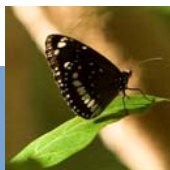




Australian Government

Department of Sustainability, Environment,
Water, Population and Communities



Challenges for policy makers dealing with climate change adaptation for biodiversity

Eliza Murray

Spotted-Tailed Quoll (D.Watts) Southern cassowary (Wet Tropics Management Authority – QLD) Glossodia orchid (S.Bourne) Swift Parrot (T.Tonelli)



Australia's Biodiversity and Climate Change, 2009

- Reform our management of biodiversity
- Strengthen the national commitment to conserve Australia's biodiversity
- Invest in our life support systems
- Build innovative and flexible governance systems
- Meet the mitigation challenge





Uncertainty: A challenge for policy makers

- Uncertain timing, scale and direction of changes in the climate
- Uncertain responses of ecosystems



Decision making with uncertainty

- More research = less uncertainty
- Precautionary approach
- Adaptive management
- Risk management
- Options approach
- Insurance
- Cost-benefit analysis
- Multi-criteria analysis



Mainstreaming and embedding

- Information and capacity building for decision makers
- Incorporation into existing processes
- Embedding in policies and programs
- New approaches to biodiversity conservation
 - Landscape scale and connectivity
 - Ecological function and ecosystem services
 - Markets



Planning and forward thinking

- National Adaptation Research Plan for Terrestrial Biodiversity
- Parks strategic plans
- Murray Darling Basin Plan
- Regional planning and spatial optimisation
- National Green Corridors Plan





Resilience

- *Resilience Thinking for NRM project*
- Resilience for policy makers:
 - Regional planning and investment through a resilience prism
 - Challenge: redundancy versus efficiency



Research challenges for biodiversity adaptation policy

- Landscape resilience and adaptation
- Role of corridors and connectivity
- Frameworks for prioritisation and risk management
- Ecosystem function analysis: what is critical?