



Government of **Western Australia**
Department of **Parks and Wildlife**



Pest, weed and disease management

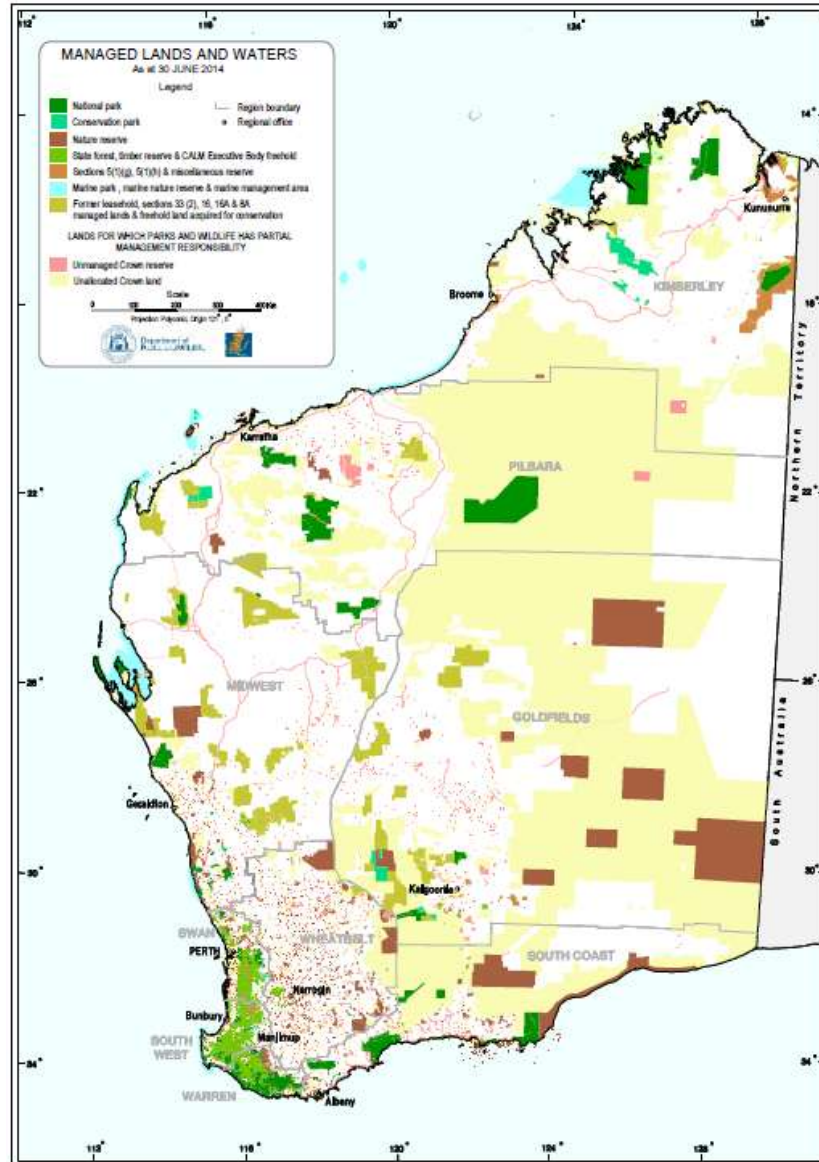
Paul Brennan, Parks and Wildlife

State Biosecurity Forum 4 Dec 2014



Large management area

- ~26m ha CALM Act lands – nature reserves, national parks, State forests & timber reserves, conservation parks, other reserve types
- >2m ha marine areas
- ~89m ha UCL & UMR outside town sites – responsibility for fire prevention, weeds, animal pests
- >117m ha or ~45% of WA
- more than NSW + Vic + Tas combined





Funding constraints

- relevant budget ranges from \$11.5 - \$13.5m/yr
- equates to ~\$0.10/ha/yr
- importance of prioritising & collaborating



Approach

- separate but related policies for animal pests, weeds and plant diseases
- priorities determined regionally/sub-regionally. Factors include:
 - legislated responsibilities/obligations
 - key assets (eg, threatened species)
 - important values (including visitor safety & enjoyment)
 - community concerns
- partnerships very important



Relevant legislation

- CALM Act responsibilities:
 - for protection of native flora and fauna, particularly conservation of threatened species
 - in relation to control of forest diseases (primarily dieback disease caused by *P. cinnamomi*) on certain lands
- also under Wildlife Conservation Act
 - regulate management of nuisance native animals causing damage (eg, kangaroos, corellas and rainbow lorikeets)
 - importation of fauna
- BAM Act 'landholder'



Key animal pests

Introduced predators





Key animal pests

Introduced herbivores





Key animal pests

Others





Weeds – prioritisation process

- developed in 2008
- periodic regional review
- ‘species-led’ component
 - focus on high impact, rapidly invasive species with a population size which is feasible to eradicate or contain to a manageable size
- ‘asset-protection’ component
 - protecting important values/land/biodiversity assets from priority widespread weeds

Examples of priority weeds

Cylindropuntia fulgida

- targeted for eradication in parts of the Goldfields and Pilbara Regions



Photo: Bob Chinnock

Asparagus asparagoides

- targeted for asset protection (threatened flora) s-w WA

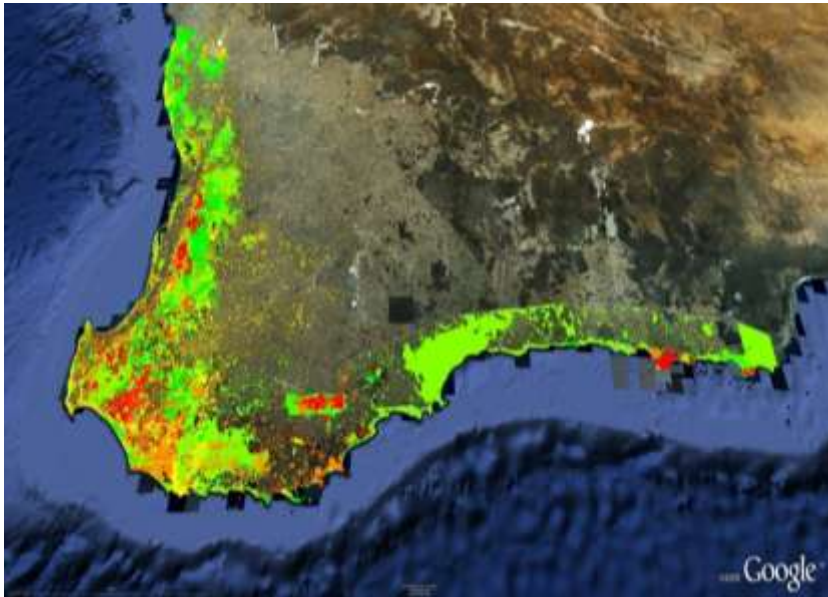


Photo: Trevor James



Key plant diseases

- *Phytophthora* dieback





Key plant diseases

- some cankers
- marri, ficifolia, banksia

- potentially, 'Myrtle' rust
- wide host range
- S-West, Kimberley?





Some key projects & partnerships

- ***Kimberley Science & Conservation Strategy (KSCS) Landscape Conservation Initiative:*** manage fire, feral animals & weeds, 6.5m ha north Kimberley - pastoralists, NT holders & indigenous rangers, government agencies, Australian Wildlife Conservancy
- ***Wild passionfruit project:*** CSIRO, Mt Gibson Iron Ore, KSCS
- ***State Cane Toad Strategy:*** freight detector dog located at Kununurra ('hitch-hiker' toads), community-schools education, collaborative research projects (eg, Syd Uni)
- ***Millstream Parkinsonia:*** Ngurrawaana Rangers, Rangelands NRM, Pilbara Corridors, Greening Australia, BHP Billiton Iron Ore, Pilbara Mesquite Management Committee (PMMC), Water Corporation





Some key projects & partnerships

- ***Fortescue Marsh:***
 - feral cat control - Fortescue Metals Group (Fortescue);
 - 'judas' donkeys, camels - Fortescue, DAFWA, pastoralists;
 - *Parkinsonia* control - Fortescue, Roy Hill, BHP Billiton Iron Ore, PMMC and pastoralists
- ***Barrow Island:*** Chevron terrestrial & marine biosecurity program (supported by Quarantine Expert Panel)
- ***Gorgon-Barrow Is. Net Conservation Benefits Fund:***
 - island biosecurity DSS (James Cook Uni)
 - Dirk Hartog Island ecological restoration - removal of goats, sheep, weed & feral cat control, & biosecurity implementation plan





Some key projects & partnerships

- ***Wild dog control:*** contribute resources to &/or coordinate efforts with several RBGs (eg, Pilbara, Carnarvon, Murchison) & DSGs (eg, 2x contract 'doggers' in Goldfields and Wheatbelt)
- ***Organised feral animal culling programs:*** some involving WA Field & Game (eg, Cape Range NPk) & Sporting Shooters Associations (eg, South Coast)
- ***Feral pig control:*** eg, member SouthWest Feral Pig Control Steering Committee; community Feral Pig Eradication Groups (eg, Northampton, Lake Muir-Denbarker); & DSGs (eg, Northcliffe, Dongolocking)





Some key projects & partnerships

- **Western Shield:** 1080 Probaits® across 3.6m ha, partners include Alcoa, BHP Billiton (Worsley), Tronox
- **Eradicat®:** APVMA registration being sought; further work to operationalise [trials underway, eg Matuwa (ex 'Lorna Glen' - Martu people) & Fitzgerald River NPK]
- **Phosphite application:** to protect threatened flora from Phytophthora dieback (eg Stirling Ra.)
- **Dieback containment & eradication trials:** Fitzgerald River & Cape Arid National Parks
- **Project Dieback:** SouthCoast NRM, DWG, Murdoch Uni, incl. identification of indicative 'Priority Protection Areas' & site works, incl. further containment/control trials





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Thank you