Local adaption – biodiversity and climate change challenges

CITY OF ONKAPARINGA

Presented by
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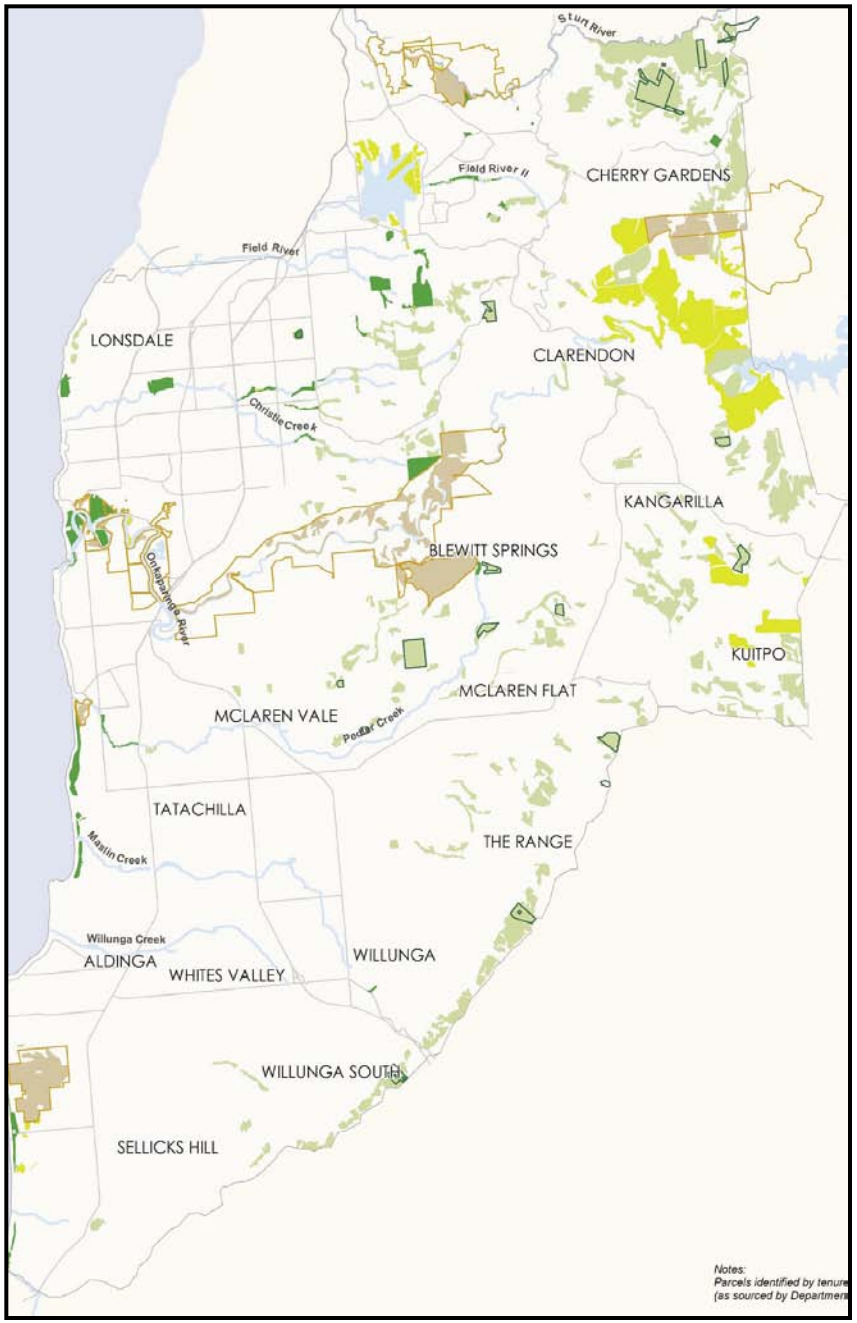
- 9% remaining
- fragmented



Council managed

- 480ha within 48 main sites
- Small isolated pockets
- Linear reserves
- Land has multiple uses
- Close proximity to dwellings.

Roles

- **Leadership**
  - Identify strategic issues and impacts
- **Owner/custodian**
  - Protect assets and resources under care and control (ie remnant vegetation/land)
- **Regulator**
  - Apply land use planning and development controls and enforce regulations
- **Information provider**
  - Provide information and data

Roles - continued

- **Advocate**
  - Advocate to other levels of government
- **Part funder**
  - Contribute to projects

Strategic and integrated approach

Community Plan – 20 year horizon

Climate Change Strategy

Water Futures

Native Vegetation Strategy

Energy Futures

Planning our City

A Thriving Economy

Our Environment

Vitality and Connection

Community Leadership

Native Vegetation Strategy 2010-2014

A focus on the land that we manage

- remnant vegetation
- revegetation

Management priorities

Maintain

- Habitats and remnants in good condition
  - easier and cheaper to avoid the effects of degradation through active management than to reverse them

Improve

- Degraded or modified habitats
  - bush regeneration works and enhancement planting

Reconstruct

- Extensively cleared land
  - eg buffers adjacent to remnant vegetation & re-establishment of specific habitats

Evidence based approach

Informed by and aligns with state and federal government management framework

Prepared sub-regional landscapes:

- Central Lofty
- Foothills and Hills Face
- Willunga Basin
- Southern Adelaide Coastline

Guides management options and positions us for access to funding

Strategy 3:
Responding to climate change

enabling species to adapt to a changing environment and sequestering carbon

- how will our flora and fauna adapt?
- carbon sinks using local species

Biodiversity modelling project

- University of Adelaide project
- Australian Research Council funding
- City of Onkaparinga contributing $30K

Capability and resources

- Advisory service
- In house team

Native Vegetation Inventory

- surveyed 56 Council reserves containing remnant vegetation
- flora and fauna species lists
- comparison between existing vegetation associations and pre-European vegetation

Sauerbier Creek

Existing Vegetation Zones

- Eucalyptus camaldulensis Open Grassy Woodland
- Eucalyptus camaldulensis Woodland
- Eucalyptus camaldulensis +/-Exotic Native Trees Open Grassy Woodland
- Eucalyptus camaldulensis Eucalyptus leucoxylon Grassy Woodland
- Eucalyptus camaldulensis Eucalyptus leucoxylon Open Grassy Woodland
- Eucalyptus camaldulensis Eucalyptus leucoxylon Woodland
- Eucalyptus camaldulensis pl. Exotic Trees Open Grassy Woodland
- Eucalyptus leucoxylon Open Grassy Woodland
- Eucalyptus leucoxylon Eucalyptus camaldulensis Grassy Woodland
- Eucalyptus leucoxylon Eucalyptus microcarpa +/-Eucalyptus camaldulensis Woodland
- Eucalyptus microcarpa Grassy Woodland

Onground Works Required

- Remnant requiring ongoing bush regeneration works
- Remnant requiring ongoing bush regeneration works & enhancement planting
- Open space requiring ongoing bush regeneration works & enhancement planting
- Open Space requiring revegetation

Pre European Zones

- Eucalyptus camaldulensis, Woodland
- Eucalyptus camaldulensis, Eucalyptus leucoxylon, Woodland
- Eucalyptus leucoxylon, +/-Eucalyptus camaldulensis, Grassy Woodland
- Eucalyptus leucoxylon, Eucalyptus microcarpa, Grassy Woodland
- Eucalyptus leucoxylon, Eucalyptus microcarpa, Woodland
- Eucalyptus microcarpa, Grassy Woodland

N

0 40 80 120

Metres

1:5,000 *(at A4)*

Challenges

- **Spatial**
  - Need for local relevant spatial and scientific data and information
- **Scale**
  - Need for regional landscape scale responses
- **Temporal**
  - Need for long term planning horizons
- **Cultural**
  - Need for appropriate skills and knowledge