ALA or State portal?
Selecting the right portal for the job

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Portal landscape

- The ALA has arrived!
- Portal *terra populus*

WA   https://naturemap.dpaw.wa.gov.au

NSW   http://www.bionet.nsw.gov.au/

SA   https://data.environment.sa.gov.au/NatureMaps

VIC   https://vba.dse.vic.gov.au

TAS   https://www.naturalvaluesatlas.tas.gov.au

QLD   Wildlife Online   http://www.qld.gov.au/environment/plants-animals/species-list

NT   http://nrmaps.nt.gov.au/

The Atlas of Living Australia

- A one-stop biodiversity data shop
- Launched in 2010
- Best of breed
  - > 55 million records
  - 200 collections
  - 3200 datasets
  - 180 institutions
  - 500 reference layers (national focus)
- >$50M funding since 2006

State biodiversity portals

- A motley crew
- Various capabilities
- State focus
- Critical to core business
- 1-2 informatics specialists FTE per State
- < $1-2M per State
- Total national investment < $20M

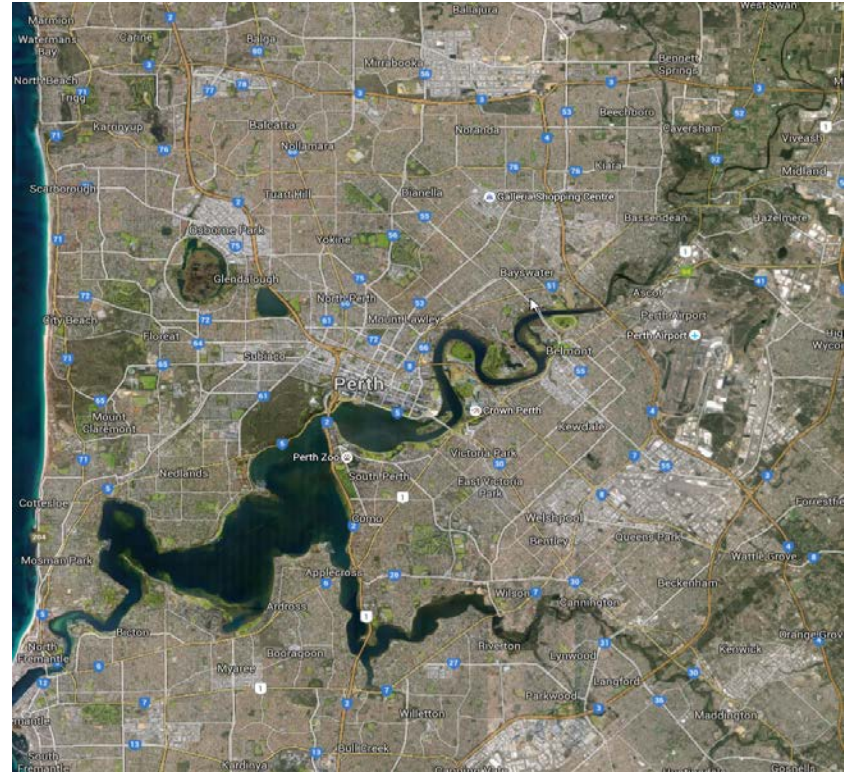# Which portal to use?

- ALA far and away the mostly capable tool
- Duplication of effort?
- Should I switch to ALA?
- Should we keep maintaining local portals?

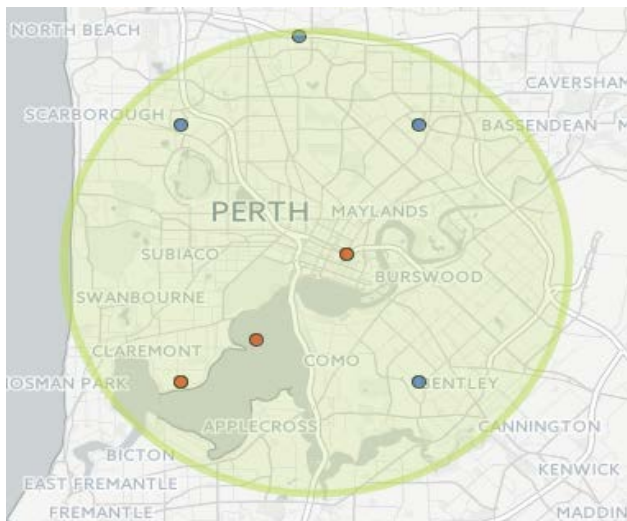# A case study: threatened species in an urban environment

- Species occurrences within 10km of Perth GPO
- WA Herbarium collection
- Conservation taxa

A case study (cont.)

- ALA workflow
- Enter location, view records
- Narrow results
- 166 records, 54 names

Explore Your Area

Enter your location or address:

| perth | Search |

Showing records for: **75 William St, Perth WA 6000, Australia**

Display records in a [10 ▼] km radius   ☰ View all records   ⊙ Downloads
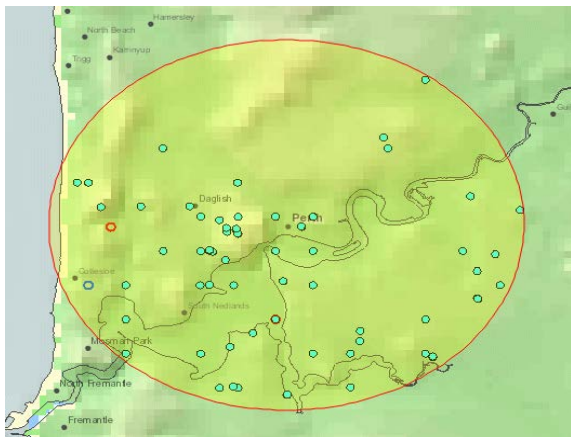
Narrow your results

Selected filters

☑ (State conservation: Endangered OR State conservation:Near Threatened OR State conservation:Extinct)

☑ Collection: Western Australian Herbarium

166 results for **[all records] - within 10.0 km of point(-31.953514,115.85705)**

A case study (cont.)

- NatureMap workflow
- Enter location
- Narrow results
- 171 records, 56 names

A case study (cont.)

- ALA – 58 names at 7 locations
- NatureMap – 56 names at 67 locations
- Restrict to locations with < 100m spatial accuracy:
- ALA - 4 names at 2 locations
- NatureMap - 18 names at 23 locations
- Discrepancy 1 – 3 km
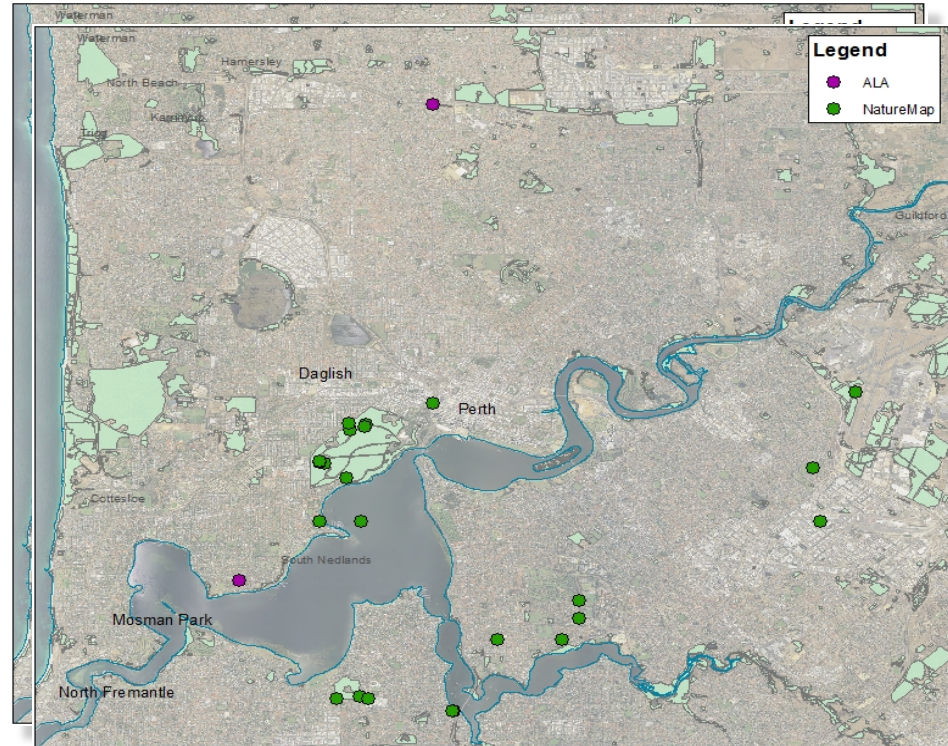
Do not adjust your set

- There is no error
- Sensitive data management
- Compound generalisation?
- Other reasons for discrepancies
- Mediating and interpreting data
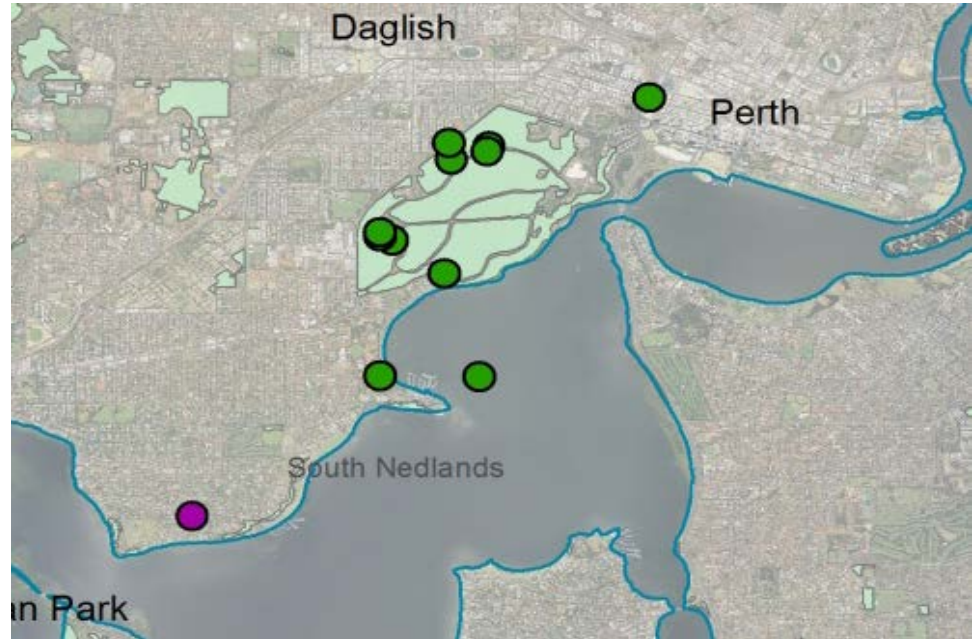- States and open data policies
- Who cares?

Scale makes a difference

- *Banksia brownii* at continental scale
  - Accuracy still matters

Scale makes a difference (cont.)

- Which side of the line matters!

Sensitive data

- Options
  - Mediate access to full resolution data (gatekeeper model)
  - Generalise coordinates
  - Anonymous locations
- Open data policies
- Is generalising good data management?
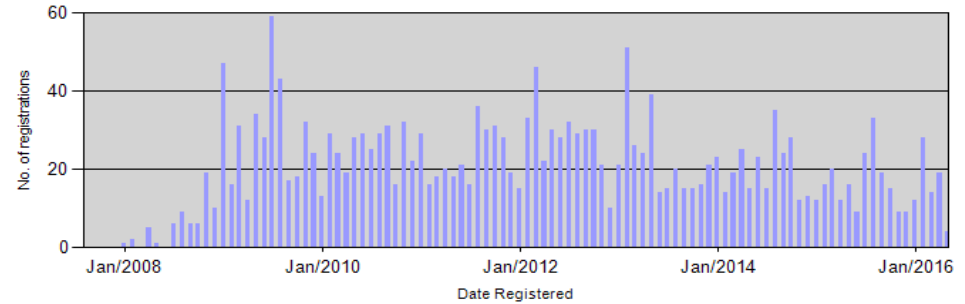 - Depends on intended use
  - Inherent risks

Banksia brownii
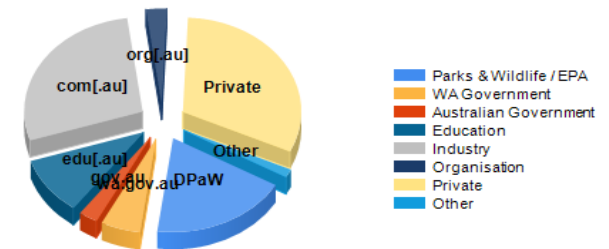
Who's using NatureMap?

- Registrations
- User types

Monthly Registrations

Registrations by Email Domain

Total registrations: 1798

Data repatriation

- ALA data now available to State providers at full locality resolution
- Significant advancement in comprehensiveness of State portals
- ALA is not just a research tool or visualiser
  - It's a data broker too

State portal → Web Service → ALA → Web Service → State portal
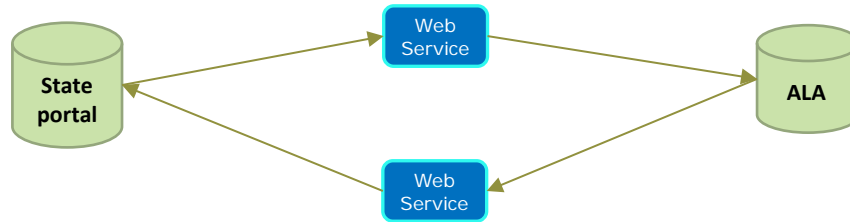
Differences between ALA and States

- Different regulatory frameworks with different accountabilities
- States:
    - Duty of care
    - Conservation focus
    - Parochial focus
    - Create and curate
- ALA:
    - Research and citizen science focus
    - Harvests and brokers data
    - National focus
    - The ALA is sexy
    - = fundable

W(h)ither the State portal?

- Using local instance of ALA is not realistic
- Maintain local portal
- Focus on content and accessibility rather than capability
  - Except where high-priority business or regulatory environment requires it
- Complement, not compete

Advantages

- Minimise data loss
- Good risk management
- Customise portal to service local clients
- Improves data quality

Which portal to use?

□ Use a State portal if:
  ■ You need to know which side of the line a species is
  ■ You need threatened species raw locality details (data may not necessarily come from portal)
  ■ You deal with many State-based layers
  ■ You need as many records as possible

□ Use ALA / Aekos if:
  ■ You need a research tool par excellence
  ■ You're modelling species distributions (esp. continental distributions)
  ■ You aren't specifically focussing on threatened species
  ■ You're generally exploring data
  ■ You want to have more fun

Thank you!