Healthy Land & Water

Leveraging Earth Observation Data for Natural Resource Management Projects

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Healthy Land & Water

**Delivering an environment** for **future generations to thrive**

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Acknowledgement of Country

In the spirit of reconciliation, we acknowledge the **Traditional Custodians** of country throughout Australia and their **connections to land, sea and community**. We pay our respect to their elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples today.

Artwork by Daniel Evans, Walkabout Warriors Art

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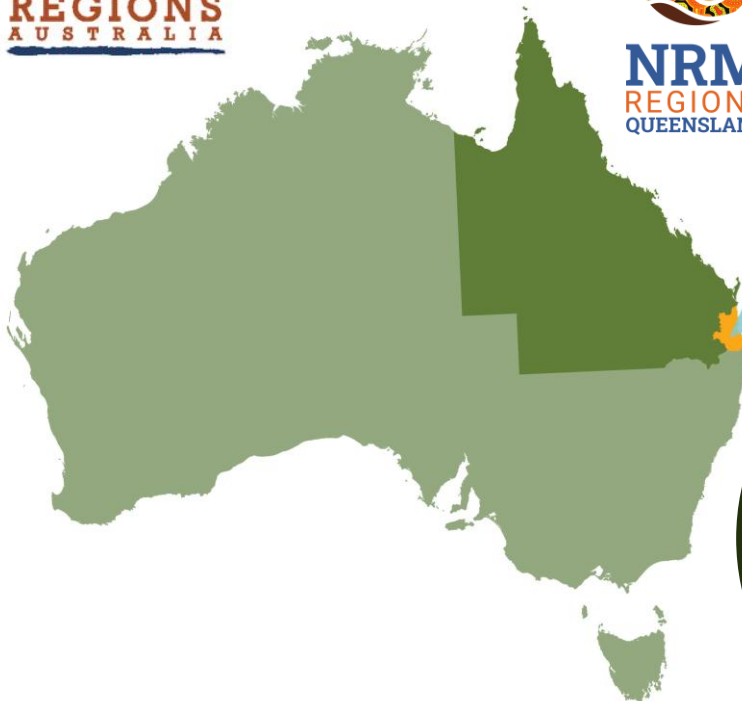
Our region is known for being:

- **Beautiful.**
- **Biodiverse.**
- **Populated.**
- **Climate change exposed.**

The official NRM body for South East Queensland

67,000 average annual population growth (last 10 years)

$14B tourism industry in SEQ per annum

1.65M number of jobs

~2400 native fauna species

40% home to around 40% of Queensland's Aboriginal and Torres Strait Islander population
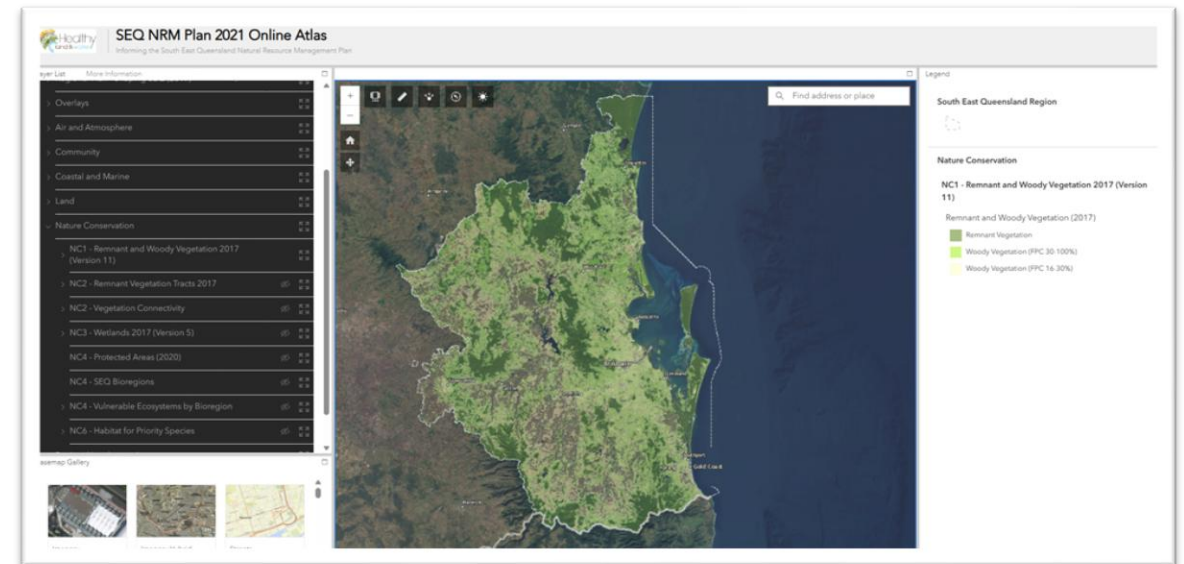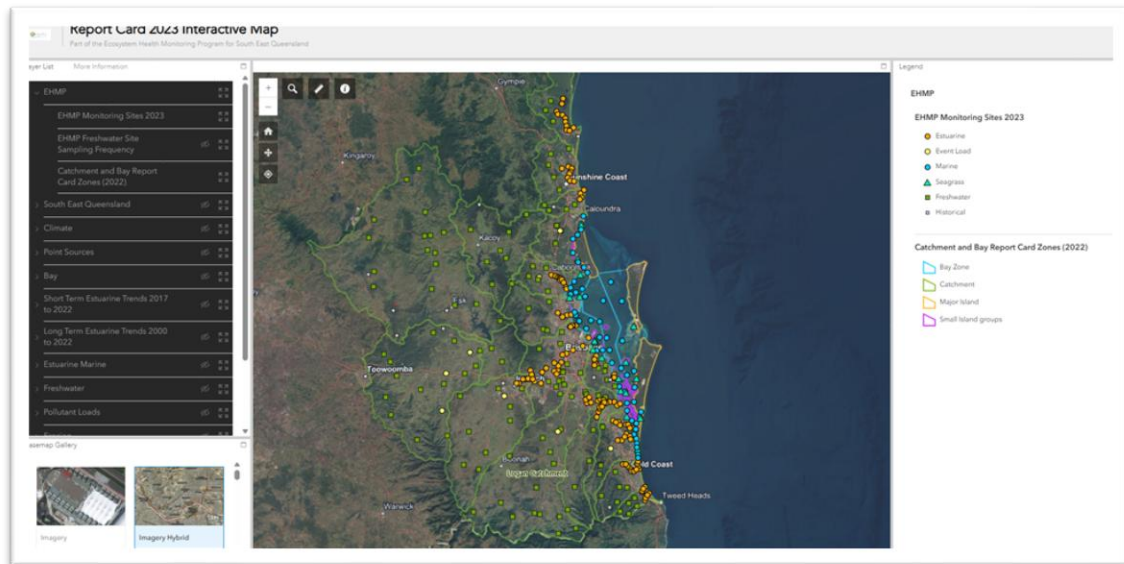
1 IN 7 Australians living in SEQ

~6000 flora species

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Where does GIS fit in NRM's

- It underpins much of our work

- Utilise region wide data to do landscape assessments

- Open-source, large scale data

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Challenges to implementation and utilisation

- **Training for HLW staff**

  – Better utilise ESRI tools to analyse satellite data

  – To use ENVI and understand the practical benefits

  – Any others that are fit for purpose

- **Data privacy standards**

  – Stakeholder data (landholders, general public ect)

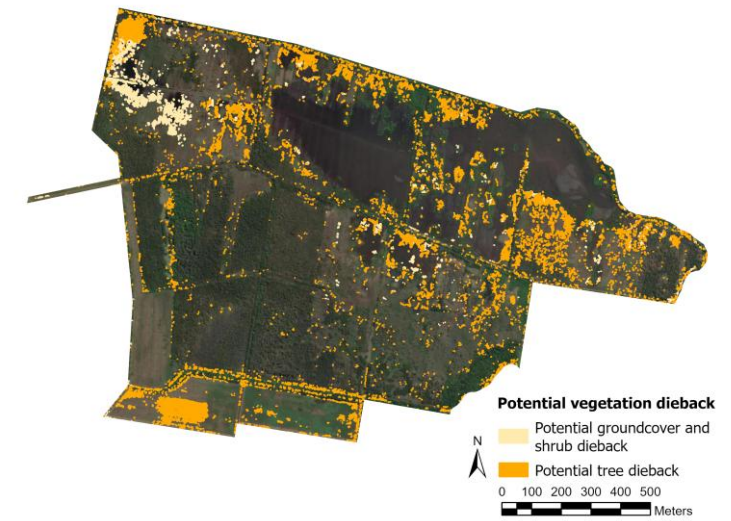 – Navigating indigenous resources

**Current software
vs
No access**

Where can EO data fit?

Potential vegetation dieback
Potential groundcover and shrub dieback
Potential tree dieback
0 100 200 300 400 500 Meters

- **Planning projects**

- **Support on-ground monitoring (tree establishment, restoration works)**

- **Better spatial and temporal information**

Opportunities

- **Less reliance on open-source data**

- **High quality region scale data**

- **Landscape scale assessment skill development**

  – Landcover change assessments

  – Update NRM plan

  – Prioritisation works

  – Integrated sediment assessment

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Thankyou!

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